THE REPORT

OF THE PANEL ON THE HOSPITALS' ROLE IN THE HEALTH COMMUNITY

CHALLENGE & CHANGE

Health Care and Hospitals on Prince Edward Island

April 1991

VOLUME ONE

April 12,1991

Mr. J. Melville Campbell, Q.C.
Chairman
Hospital and Health Services Commission
P. O. Box 3000
Montague, P.E.I.
C0A 1R0

Dear Mr. Campbell:

We are pleased to provide you with The Report of the Panel on the Hospitals' Role in the Health Community.

The entire report contains four volumes: *The Report* and three supplementary documents entitled, *Your Point of View*, *Service Profiles* and *A Statistical Compendium*.

The Panel hopes this report will assist the Commission in the planning and delivery of health care services for Prince Edward Island residents.

We thank you for the opportunity to have participated in this important undertaking.

Yours very truly,

Dorothy MacLeod,
Panel Chair

Murray Mundle, M.D.
Panel Member

Wilhelmina Parker
Panel Member

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Acknowledgements

The Panel on the Hospitals' Role in the Health Community thanks the many individuals and organizations who participated in the study.

In particular, the Panel gratefully acknowledges the invaluable contributions of the Panel Coordinator and the Panel staff.

As Chair of the Panel, I express my appreciation to panel members Dr. Murray Mundle and Wilhelmina Parker for their commitment throughout the course of the study.

Dorothy MacLeod
Panel Chair

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Executive Summary

In October 1988, the Hospital and Health Services Commission invited the participation of the P.E.I. Medical Society and the Hospital Association of P.E.I. to examine the role of the hospital on Prince Edward Island in the context of today's health care environment. A three-member Panel was appointed to conduct the study process along with administrative and support staff. The Role Panel began its work in early 1989.

The Role Panel's terms of reference were comprehensive and ambitious. The Panel was asked to examine almost every facet of the hospital system, including structure, services, mission or philosophy, linkages with other parts of the system, distribution of hospital services, and the future challenges to hospitals. After only a short time into the study process, the Panel began to realize the enormity and complexity of its assignment. The Panel simply did not have the information in many instances, nor the resources in others, to pursue the precise objectives as dictated by the terms of reference. Because of these limitations, the Panel believes that a commitment will need to be made to a Phase II process to further pursue a number of the issues identified through this study.

In addition to the *Final Report*, the Panel's efforts also produced three supplementary reports that contain a wealth of information which the Panel believes will be quite useful in further pursuing the objectives of the terms of reference. The *Your Point of View* document summarizes the comments, observations and concerns raised by all groups and individuals who submitted briefs or were interviewed over the course of the consultation process. The *Statistical Compendium* document summarizes a range of admission-discharge data for the 1987/88 operating year. *The Service Profiles* document includes a descriptive account of virtually all services provided by hospitals, and the issues that are pertinent to each service.

In a number of areas, health care services available to Island residents generally are of high quality. The individual boards, hospital administrators, health care professionals, and health care planners are all working very hard to ensure they provide the best care possible within their respective systems or areas. However, there are many larger system issues which the Panel feels need to be addressed if our health care system is to endure over the next decade.

In the Panel's view there are four strategic areas where a renewed commitment to manage the health care system differently and more effectively is needed. These areas include the broad policy and program development framework, the linkage and coordination between the major health service providers, the utilization of hospital and medical services, and the organization, deployment and utilization of health care professionals and support staff.

The Panel has recommended that the Hospital and Health Services Commission, together with government, establish a Phase II initiative to address the recommendations made by the Panel with respect to these four strategic areas. The Role Panel believes that this must happen to strengthen the province's future capacity to deliver quality health care.

I. INTRODUCTION

Background

In 1987 the province of Prince Edward Island, through the efforts of the Hospital and Health Services Commission, began a process to explore and examine some of the critical issues with respect to health care. In February of 1988 the Commission hosted a Health Forum, involving some 60 or more health care professionals, administrators and planners, to review the current issues, identify priorities and suggest some new direction.[1] Topping the list of priorities was the general area of planning and coordination within the broad health care system; more specifically, the forum identified the need to establish a process to assess the ongoing requirements for physician resources within the province, and a need to examine the future role of the hospitals in light of some of the emerging trends within the health care environment.

The Role Panel: Its Constitution and Membership

In October 1988, the Hospital and Health Services Commission of P.E.I. made a decision to review the role of hospitals in the health community. As this role has an impact on at least three major stakeholders in hospital care within P.E.I., the review became a joint venture of the Hospital and Health Services Commission, the P.E.I. Medical Society and the Hospital Association of P.E.I. The Panel on the Hospitals' Role in the Health Community was established with the following representatives: Dorothy MacLeod, representing the Hospital & Health Services Commission Board, as Chairperson; Dr. Murray Mundle, representing the P.E.I. Medical Society; and Wilhelmina Parker, representing the Hospital Association of P.E.I. Peter Ramsay, Administrator of Souris Hospital, was seconded to the Hospital & Health Services Commission as Panel Coordinator. In early 1989, the Panel began its task with the following terms of reference which were established by the Executive Advisory Committee[2] and ratified by the representative bodies:

Terms of Reference

1. Develop profiles of current services provided by each hospital within a framework of total health services available in the catchment area.
2. Develop a provincial overview of individual hospital and health services currently available.
3. Identify current linkages and relationships between hospital programs and other health services.
4. Assess the structure of the current delivery system.
5. Develop a philosophy for the role of hospitals in the health care community.
6. Identify appropriate types and levels of hospital services.
7. Determine the most appropriate local, regional and provincial distribution of hospital services for the future.
8. Explore opportunities for improved linkages between hospitals and community services.
9. Identify future challenges facing the role of hospitals in the health care community and develop provincial standing mechanisms to appropriately respond to future developments.[3]

In view of the major observations resulting from the deliberations of the 1988 Health Forum, the Role Panel was to examine the hospital's function in the context of the broader health community, and make recommendations that would ensure "managed growth and planned development." In short, the essential objective of the Role Panel's work was to examine the function of the hospital in the current health care environment, identify the major challenges facing the health community-at- large including the hospital system, and identify ways in which the hospital could better integrate its role and services within the needs of the larger community.

1. Prince Edward Island Hospital and Health Services Commission, *The Prince Edward Island Health Forum Report* (Charlottetown: Queen's Printer, 1988).

2. The Executive Advisory Committee is an advisory committee to senior management at the Hospital and Health Services Commission. It is comprised of representation from the P.E.I. Medical Society, the Hospital Association of P.E.I. and the Hospital and Health Services Commission.

3. Minutes, Executive Advisory Committee. December 12, 1988.

The Role Panel wishes to acknowledge at the outset of this report that the terms of reference were comprehensive and ambitious. The Panel was able to realize this only after some months into the project. The Panel encountered two circumstances which served to consume much more time and resources than was originally anticipated. The first was the request by government that the Panel become involved with the planning for the renovation of the Western and Community Hospitals. The second was the matter of attempting to retrieve accurate service data from the hospital system for purposes of study and analysis.

While in some ways the experience with the western hospitals was useful to the Panel's task, it did put the Panel in a "solution-finding" mode rather than a "study" mode. The lack of a good information base from which to extrapolate service data and measure trends over a specific time frame limited the Panel's capability to complete its work properly as originally set out in the terms of reference. In the areas where the Panel has fallen short of its objectives, the Panel has recommended that further work be undertaken.

In this sense, then, the Panel views this report, along with the three supplementary reports, as a "stage setting" effort which will provide both the context and the data required to pursue further certain issues. The three main supplementary documents are *Your Point of View*, *Service Profiles*, and *Statistical Compendium*. *Your Point of View* is a comprehensive listing of the many observations and comments provided by the 225 interviewees and submissions. The *Service Profiles* document includes a descriptive account of the services provided by hospitals. The *Statistical Compendium* document provides a statistical analysis of the utilization of hospital services for the 1987-88 fiscal year. Other supplementary documents prepared by the Panel include: *Report on Out-of-Province Specialty Clinics*, *Hospital Catchment Areas Demographic Description*, *General Hospital Utilization Data* and the *Discussion Paper: Surgical Services on P.E.I.*

The Process

It was an early decision of the Panel to undertake a process of consultation with a broad cross section of organizations, associations and individuals who were either heavily involved or deeply interested in the health field. Over 300 invitations were sent out requesting comment and input that would assist the Panel with its task. During the period between February 1989 and June 1990, the Panel heard from some 115 organizations and groups (see Appendix A for complete list); in addition, approximately 210 individuals within the larger health system were interviewed by the project coordinator (see Appendix B for complete list).

The Role Panel is deeply appreciative of the efforts put forth by all the organizations who came before the Panel to express their views and concerns. It was virtually impossible for the Panel to attempt to analyze and comment on the multitude of concerns and issues that were expressed. However, the Panel was able to use the many differing comments and views to help discern the larger system problems which are addressed in the final sections of this report.

The introductory sections and Sections II, III, and IV of this report are written to give the reader a sense of the larger health care community and how the hospital currently interacts with this community. Sections V to VIII identify and develop some of the more pressing factors regarding the growth and development of hospital and health care. Sections IX, X, and XI outline a number of current and emerging trends within the broad health care environment. The remaining sections deal with specific issues which the Role Panel believes must be addressed, and the final sections set out the Panel's subsequent recommendations.

II. MODERN HEALTH CARE — A LIFE-LONG PROCESS

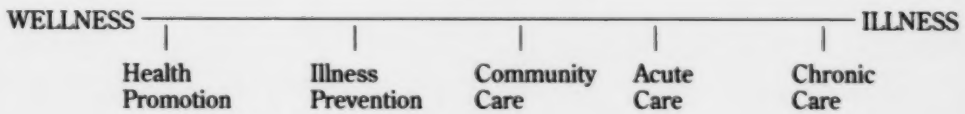
Before setting the context for the health care system on Prince Edward Island, it may be useful to note that the concept of health care has changed in the last decade or so. Increasingly the care of one's health is becoming recognized as an incremental, life-long process rather than an event which is precipitated by the onset of a sudden illness or injury. Health is now viewed as a personal resource to be valued and safe-guarded by both the individual and the community.

Continuum of Care

In response to this gradual shift in the attitude and view of personal health, policy and planning trends are beginning to describe the various elements and components of the health care system as a continuum;[4] that is, moving from a point where the individual is helped to become more knowledgeable and aware of healthful practices to a point where the individual may require intensive medical intervention and care because of an acute illness or a chronic health condition. The continuum of care can be drawn to look something like this:

The agencies involved in the delivery of services and supports within the health care community are many, and their involvement and participation covers the entire range of the continuum. Some of these agencies provide acute care services, while others may provide chronic or extended care. Other services are community-based in nature and provide support, education and advocacy. Still others may take a risk-management or health protection focus. When one looks at the number of agencies and individuals who are involved, the number of specific health- related statutes that are on the books, and the amount of financial and human resources committed, one is given a sense of the magnitude of the investment in the maintenance of the health and well-being of Islanders. For this continuum to function effectively in the best interests of Islanders, the integration of its goals and purposes is crucial; for only when there is consensus on broad goals regarding the health care continuum will it be possible for the health care system to work effectively.

Continuum of Care



4. The Honourable Jake Epp, Minister of National Health and Welfare, *Achieving Health for All* (Ottawa: Queen's Printer, 1986).

III. THE HEALTH COMMUNITY

A Diverse and Complex Environment

With the patient as the focal point, the health community on Prince Edward Island is a complex scene of interdependencies; it is comprised of a diverse array of health care workers, who provide a range of services within acute, chronic and extended care institutions, as well as community-based services. This scene is further over-laid at various points with the federal government, the provincial government, quasi-governmental bodies, elected community boards, and a whole host of interest groups and organizations led by a relatively skilled volunteer sector. This description of the health care community is not unique to P.E.I.; it is the situation within most of the western world, and it is the reality of the health environment as we move toward the end of the century.

Some Early History

At the turn of the century, health care did not look at all like what we have today. The essential focus was on assisting the patient to survive, with the medical intervention coming only after the onset of serious injury or illness. Virtually none of today's technology, elaborate hospital facilities, or pharmaceutical medicines were in existence.

In the early years, the concern and momentum that fostered the community climate with regard to establishing a hospital came from the churches, the medical community, and local charitable organizations. In the period prior to the proliferation of hospital facilities most medical interventions were home based. If an individual had a serious illness or injury, the doctor would visit the patient and provide whatever treatment was required.

Hence, the early hospitals were intended to support this style of "outreach" health care, a style which was to change dramatically over the course of the latter half of the twentieth century.

The essential function of the community hospital in the early years was clear; its purpose was to provide acute medical care to the sick and injured within a given geographic area. The establishment of the actual physical institution made it possible for the community to acquire and develop the "critical mass" in terms of medical skill and knowledge to serve the health needs of the community. The hospital was a place to treat those with serious illness or injury. It was only after the onset of "the modern health care system" that the hospital's value to the community came to be viewed in broader economic and social terms.

In the early part of the twentieth century, the development and establishment of any community service was almost always the result of a community response to a specific community need. From the outset, the people of the community were directly involved in planning and supporting the enterprise. In short, it was their needs they were concerned about. It was their time, their energy and their money that was being invested, and so, as a result of this natural evolution, the hospital became integrated into the fabric of the community. Over time the local hospital became not only a center for acute care, but also a stabilizing influence on the local economy. As well, it communicated a certain status message regarding the community itself.

Development of "Modern" Health Care

The development of the modern-day health care system in Canada did not begin until after the Depression years. It has been said that the physical and emotional trauma experienced by the population as a result of the Depression was, in large measure, the impetus for much of the development of our health and social security structures today.

On P.E.I., the development of our modern health care system did not really begin until the late 1950s. This is not to say there were no developments up to this time. There were both medical and hospital services available that were of high quality in terms of the standards of the day. However, these services also suffered from the types of drawbacks and difficulties prevalent across the country, including: the lack of stable funding, limited access by the poor, and weak linkage of services between jurisdictions. In short, prior to the 1950s, there was no stable foundation from which a more comprehensive health care system could begin to emerge.

For any enterprise or system to evolve and

develop, resources are needed; human resources are required to develop the concepts and ideas that will frame the system, and financial resources are needed for implementation. On P.E.I., the developmental concepts and ideas were available within the province. However, the financial resources, like elsewhere across the country, were limited. The initiatives that allowed this province to access the required financial resources to develop services were the introduction of the *Hospital Insurance and Diagnostic Services Act* (1959) and the introduction of the *Health Services Payment Act* (1970).

In addition to these two major health initiatives, there was one other crucial development in the social services sector; this was the *Canada Assistance Plan* (1967). In many ways, the *Canada Assistance Plan* was the "medicare" plan for the social services sector, and it allowed the province to provide basic material assistance and social supports to those in need. This basic level of support for many people is crucial to their physical and emotional well-being. Hence, the province's decision to participate in these three federal initiatives allowed it to begin to develop its own health care and social service infrastructures. The province's "coming of age" in the broad health care field had begun.

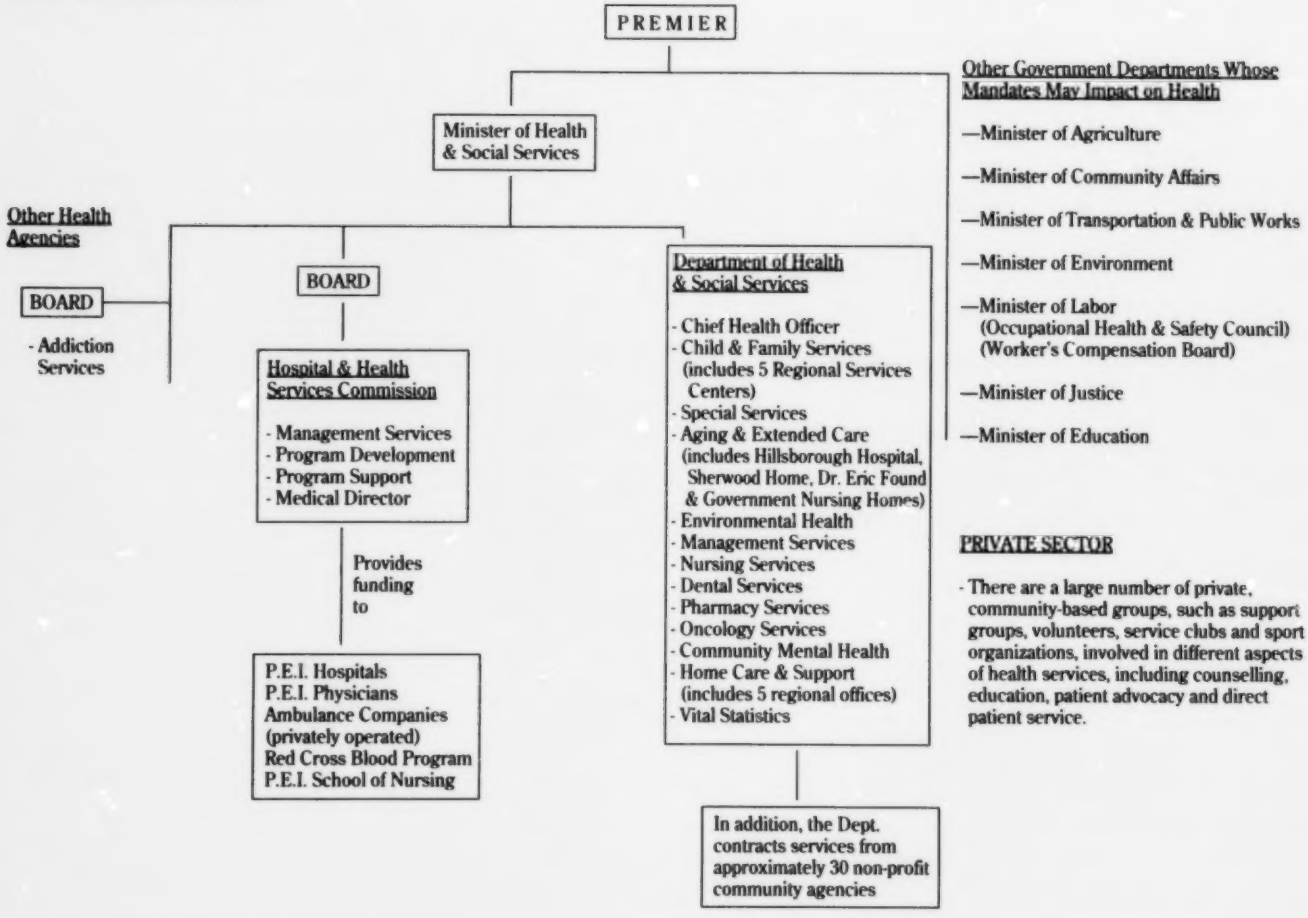
IV. STRUCTURES - THE EXISTING SYSTEM

The following section gives an overview of the sectors involved in the health care continuum:

A) Hospitals;
B) Department of Health and Social Services;
C) Other Community-based Services;
D) Out-of-Province Medical Services.

EXHIBIT 1

PRESENTS AN OVERVIEW OF THE ORGANIZATIONAL STRUCTURE OF THE P.E.I. HEALTH CARE SYSTEM.


PREMIER
Minister of Health & Social Services
Other Health Agencies
BOARD
- Addiction Services
BOARD
Hospital & Health Services Commission
- Management Services
- Program Development
- Program Support
- Medical Director
Provides funding to
P.E.I. Hospitals
P.E.I. Physicians
Ambulance Companies (privately operated)
Red Cross Blood Program
P.E.I. School of Nursing
Department of Health & Social Services
- Chief Health Officer
- Child & Family Services (includes 5 Regional Services Centers)
- Special Services
- Aging & Extended Care (includes Hillsborough Hospital, Sherwood Home, Dr. Eric Found & Government Nursing Homes)
- Environmental Health
- Management Services
- Nursing Services
- Dental Services
- Pharmacy Services
- Oncology Services
- Community Mental Health
- Home Care & Support (includes 5 regional offices)
- Vital Statistics
In addition, the Dept. contracts services from approximately 30 non-profit community agencies
Other Government Departments Whose Mandates May Impact on Health
—Minister of Agriculture
—Minister of Community Affairs
—Minister of Transportation & Public Works
—Minister of Environment
—Minister of Labor (Occupational Health & Safety Council) (Worker's Compensation Board)
—Minister of Justice
—Minister of Education
PRIVATE SECTOR
- There are a large number of private, community-based groups, such as support groups, volunteers, service clubs and sport organizations, involved in different aspects of health services, including counselling, education, patient advocacy and direct patient service.

SOURCE: HOSPITAL ROLE PANEL, 1990

A) Hospitals

The province of Prince Edward Island currently has 694 acute care beds, located in seven community hospitals, and serving a population of approximately 127,000 residents. The location and catchment areas of each hospital are illustrated in Exhibit 2.

EXHIBIT 2

P.E.I. HOSPITALS, BEDS AND CATCHMENT AREAS

Hospital	Location	# of Beds	Catchment Area*
Western	Alberton	50	6,376
Community	O'Leary	33	6,793
Stewart Memorial	Tyne Valley	23	2,374
Prince County	Summerside	162	28,804
Queen Elizabeth	Charlottetown	351	67,100
King's County Memorial	Montague	50	10,487
Souris	Souris	25	4,716

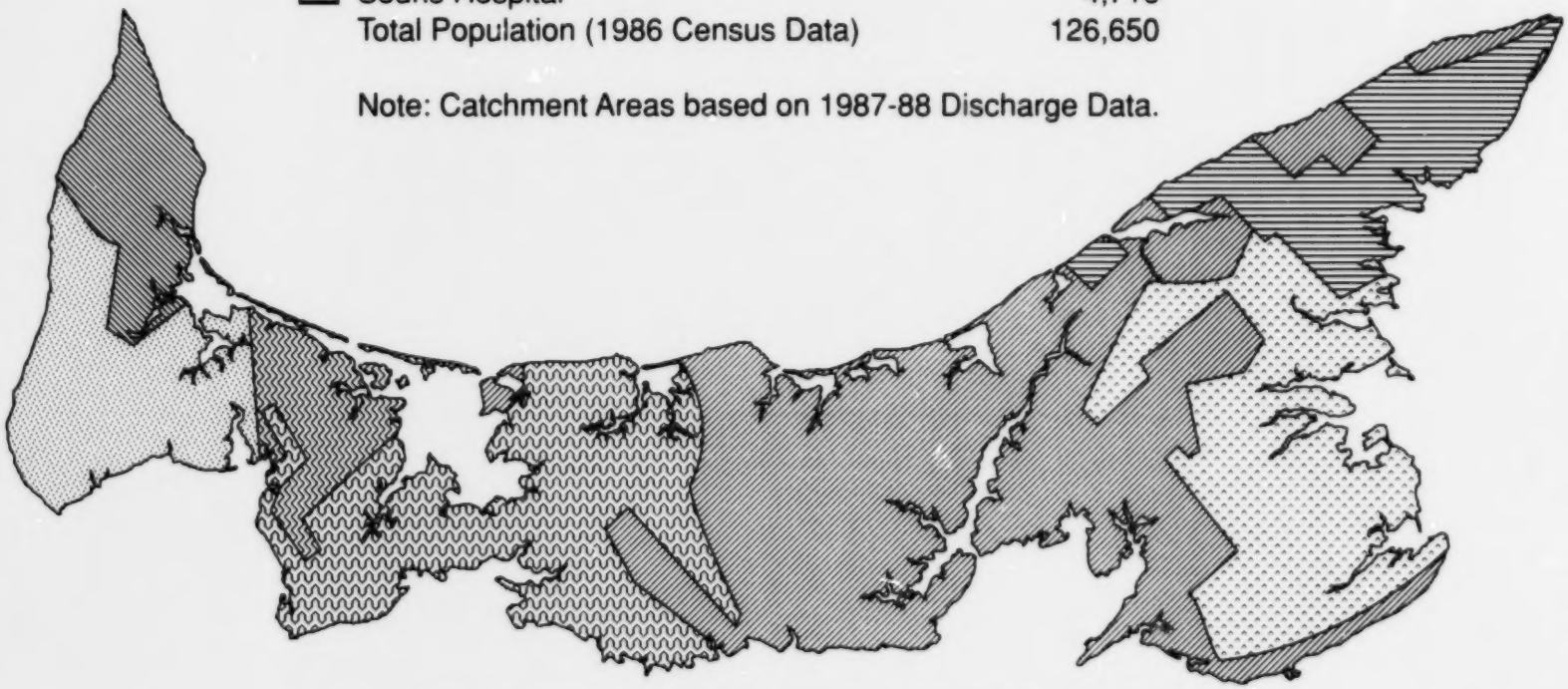
* The catchment areas are allocated according to basic primary medical care as defined in the Hospital Catchment Area; Demographic Description[5]

5. Hospital and Health Services Commission, the Panel on the Hospitals' Role, *Hospital Catchment Area; Demographic Description* (Montague: n.p., 1989).

PRINCE EDWARD ISLAND HOSPITAL CATCHMENT AREAS

Hospital	Population Served
Western Hospital	6,376
Community Hospital	6,793
Stewart Memorial Hospital	2,374
Prince County Hospital	28,804
Queen Elizabeth Hospital	67,100
Kings County Memorial Hospital	10,487
Souris Hospital	4,716
Total Population (1986 Census Data)	126,650

Note: Catchment Areas based on 1987-88 Discharge Data.



Produced by: Panel on the Hospitals' Role on the Health Community, 1990

Because health status is closely linked with socioeconomic status, information was obtained on demographic characteristics among hospital catchment areas on P.E.I. This information is presented in the ***Statistical Compendium***.

B) Department of Health and Social Services

EXHIBIT 4

SERVICES OFFERED BY THE DEPARTMENT OF HEALTH & SOCIAL SERVICES

DIVISION	LOCATION	PURPOSE	SERVICES PROVIDED
Aging & Extended Care	Alberton, Summerside, Charlottetown, Montague Souris	To operate and manage provincial manors and long term/extended care facilities.	Management of manors and long-term/extended-care facilities Occupational Therapy, Dietetic Consultant, Nurse Consultant, Provide consultation and support to government-operated facilities as well as the private sector facilities.
Child & Family Services	Wellington, O'Leary, Summerside, Montague, Souris	Responsible for the delivery of a broad range of services to individuals and families in need.	Child Welfare services, including protection, adoption, foster care, etc, Day Care Service Subsidy, Welfare Assistance, Retardation services, Rehabilitation services, General counselling.
Environmental Health	province-wide	To promote and establish, through education, consultation and inspection, standards which are in keeping with the Public Health Act of P.E.I. and its regulations.	Food Protection Program, Accommodations Program, Occupational Health Program, Recreational/Institutional Program, Education and Consultation Program, Radiation Protection Services Program.
Community Mental Health	regional basis 1 team in each county, Day Treatment Program in Ch'town	To provide a broad range of community-based mental health services to individuals, families, groups and communities.	Mental health assessment, Consultation services, Direct treatment services, Community development, Prevention/ education services, Day treatment unit, Administration of drugs.
Dental Public Health	province-wide	To assist Prince Edward Islanders to achieve and maintain good dental health.	Children's dental care program, Preventative orthodontic program.
Home Care & Support	Souris, Montague, Charlottetown, Summerside, O'Leary	To provide services which enable elderly or disabled persons to remain in or return to their own homes, through direct services.	Home Care Nursing, Visiting Homemaker, Community Support Services, Occupational Therapy, Physiotherapy.
Management Services	Charlottetown	To provide support to all Divisions within the Department of Health and Social Services in the areas of personnel, finance, administration, audits, word processing and management information systems.	Personnel, Management Information System, Audit section, Health Manpower Planning.
Nursing	Tignish, O'Leary, Summerside, Kensington, Charlottetown, Montague, Souris	To serve as the vehicle within the Department of Health and Social Services for the execution of community services in the detection and prevention of illness or disability, and in the promotion and maintenance of optimum health for Islanders of all ages.	Public health programs include: - maternal and child health, - school and pre-school health - communicable disease control - health supervision and prevention - health education - diabetes education - family life education
Oncology	Charlottetown, Summerside	To provide consultations for patients with or suspected of having cancer, follow-up of patients, and compilation of information on cancer incidence on P.E.I.	Consultation for cancer patients, Drug treatment for cancer patients, Follow-up for cancer patients, Completion of information on cancer incidence on P.E.I.
Pharmacy	Prov. Pharmacy in Charlottetown	To provide professional pharmaceutical services to specialty groups and government institutions and manors with optimum benefit in a cost-effective manner.	Provides a wide range of prescription and non-prescription pharmaceutical products to Social Assistance clients, Drug Cost Assistance Plan for seniors, Drug distribution services to institutions and manors, Consultation services to institutions and manors.
Special Services	Charlottetown	Responsible for program planning development, consultation and the coordination of a number of departmental services.	Employment programs for welfare assistance recipients, Services to the physically and mentally handicapped, Vocational rehabilitation, Speech therapy, Early childhood development and day care, Nutritional services for pregnant and nursing mothers and their infants, Services to the long-term mentally ill.

SOURCE: 1988/89 Annual Report, Department of Health and Social Services

C) Other Community-based Services

AMBULANCE SERVICES

There are six privately owned, licensed ambulance companies providing emergency and non-emergency medical transportation on P.E.I. The level of service provided varies from basic life support to advanced life support systems. The source of funding for these companies includes user fees, third-party revenues and subsidization through the Hospital and Health Services Commission.

Ambulance services are located province-wide in Souris, Montague, Charlottetown, Summerside, Alberton and O'Leary.

Additional province-wide, non-emergency transport services based in both Charlottetown and Summerside include Pat & The Elephant, Care-A-Van and Donna's Transport.

ADDICTION SERVICES

The purpose of Addiction Services is to serve the needs of the chemically dependent person and/or their families through community development and treatment programs.

Residential treatment programs are delivered through detoxification facilities, rehabilitation centers and long- and short-term-care facilities.

In addition to the structured treatment programs, the agency provides various non-residential services, such as: assessment and intervention interviews, individual counselling, follow-up counselling, Antabuse administration and screening.

Residential Programs:
-Assessment - Charlottetown
-Detox. - Souris, Charlottetown and Summerside
-Short-term care - Charlottetown, Summerside
-Long-term care - Georgetown
-Rehab. - Charlottetown, Summerside

Non-Residential Programs:
-Family Program - Souris, Charlottetown and Summerside
-Aftercare - Souris, Charlottetown and Summerside
-Adolescent - Charlottetown
-Assessment - Souris, Summerside
-Rehab. Services - Charlottetown, Summerside

Community Development Programs:
-Community
-Schools
-Professional
-Media

These programs serve the population of their respective counties but are administered through offices in the above locations.

COMMUNITY SUPPORT NETWORKS

The vital health roles of informal support networks has only recently been recognized. It has been said that "to create social conditions which maintain and enhance health, communities need support networks that can encourage people to take more control over their own lives and can help to empower them."[6]

Three main types of informal community groups that are involved in giving health care can be identified as: i) the extended family and local neighborhood organizations, such as Block Parents; ii) the volunteer organizations such as a telephone hotline or a rape crisis center; and iii) the self-help groups, such as Alcoholics Anonymous or the Celiac Association.

All three types provide valuable sources of support, highlight the kinds of health problems people feel are not being adequately addressed by the formal health care system, and reinforce the paradigm shift occurring in health; that is the changing focus from traditional illness care to that of wellness care.

There are approximately 100 community interest groups/volunteer organizations in Prince Edward Island that are involved in providing health care, with at least one such group located in virtually every community.

D) Out-of-Province Services

The provincial government health care programs, acute care facilities, and community organizations/volunteer groups provide a wide range of services to Islanders; however, many residents continue to be referred out-of-province to access services to accommodate their health care needs.

A variety of reasons contribute to out-of-province referrals:

-the lack of specialized technology such as that found in out-of-province tertiary care centers;

-the absence of specific health care professionals/specialists. The small population of Prince Edward Island would make it difficult for some health care specialists to maintain their level of expertise.

6. Kelner, Merrijoy, "Community Support Networks." In *Canadian Journal of Public Health*, May/June, 1985, 69.

-the perception by some members of the public that health care services provided in other provinces are "better" than those provided within Prince Edward Island.

In 1989/90, the province of P.E.I. spent $109 million on total physician and hospital services, with out-of-province care representing approximately $13 million,[7] or 12 per cent of the total. This could equate to a budget of a 150-bed hospital.

Because the Canada Health Act provides Canadian residents with the principle of portability, residents are entitled to medical coverage in any province in this country. However, it is believed this flexibility encourages inappropriate referrals. It is noted, for example, that although Prince Edward Island has three orthopedic surgeons, in 1989 9.3 per cent of referrals were of an orthopedic nature.

The increase in the utilization of out-of-province hospital costs over the past decade (see Exhibit 9, page 14) is a source of concern to health care administrators. It is acknowledged that in a number of instances Island residents simply have no other option, as the service or treatment they require is not available on the Island. However, there is evidence that a number of Island residents either are referred or simply go on their own, to out-of-province health care facilities to receive services or treatment that are available within the province. This raises some pertinent questions. Should there be a referral protocol in place to ensure that the situations or cases which go out-of-province for services are those whose treatment requirements can only be met by doing so? Should greater efforts be put toward developing certain services or treatments within the provincial health care system? The Role Panel will comment further on these questions in the Recommendation Section (see Recommendation #8) of this report.

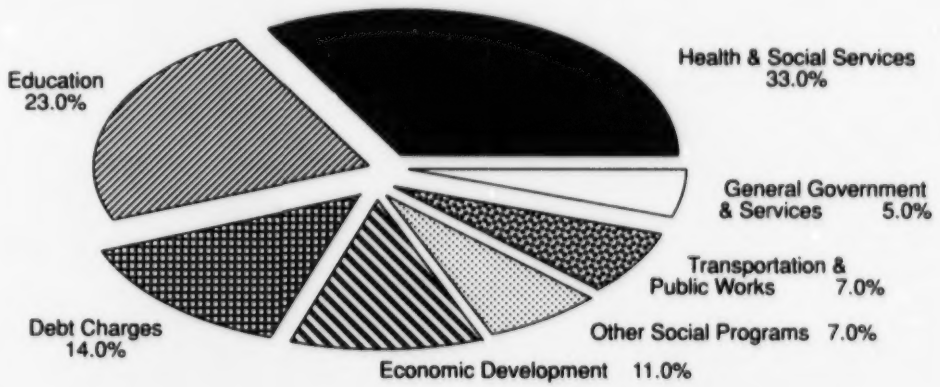
7. Office of the Auditor General, Hospital and Health Services Commission Audited Financial Statements for the year ended March 31, 1990 (Charlottetown: n.p., 1990), Statement 2.

V. HEALTH CARE COSTS

In Canada, as in many other countries, health care has become an expensive business. Despite efforts to curb costs, health care expenses have continued to rise, costing Canadians approximately $55 billion in a single year. For the province of P.E.I. in 1989, the budget for hospitals and physician services alone was 17 per cent of the total provincial budget. If the Department of Health & Social Services is included, this increases to 33 per cent, or approximately $225 million. As shown in Exhibit 5, this amount compares with the Departments of Education at 23 per cent, Transportation and Public Works at 7 per cent and other social programs at 7 per cent.

EXHIBIT 5

PROVINCIAL EXPENDITURES



Source: P.E.I. Budget Highlights, 1990-91

According to Health & Welfare Canada Statistics, P.E.I.'s per capita health expenditures in 1987 were $1,534, with only Newfoundland recording a lower per capita amount. In spite of this, P.E.I.'s percentage of its gross domestic product (GDP) spent on health care is the **highest** of all provinces. A comparison of the provinces' and Canada's per capita expenditures and percentages of gross domestic product for 1987 are presented in the following table:

EXHIBIT 6

CANADA AND THE PROVINCES, PER CAPITA HEALTH EXPENDITURES AND PERCENTAGE OF GROSS DOMESTIC PRODUCT, 1987

Canada and provinces	Per capita health expenditures	Percentage of gross domestic product
Canada	$1,869	8.71
P.E.I.	**1,534**	**12.15**
Nfld.	1,473	11.72
N.S.	1,772	11.64
N.B.	1,601	10.78
Quebec	1,770	8.86
Ontario	1,985	8.20
Manitoba	1,852	9.97
Sask.	1,871	10.99
Alberta	1,906	7.69
B.C.	1,869	8.88

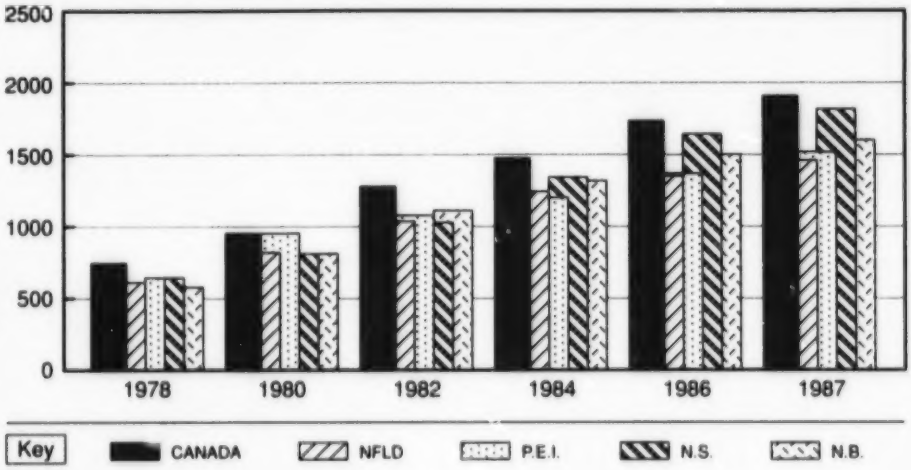
Source: Health and Welfare Canada

Note: Health expenditures include all institutions, all professional services, all drugs and appliances, and all other health costs, including prepayment administration, public health, capital expenditures, health research, public and private home care services, public ambulance services and miscellaneous health costs.

Per capita health expenditures for P.E.I. have more than doubled in the past 10 years, which is also consistent with the other Atlantic Provinces and the rest of Canada (Health & Welfare Canada). Exhibit 7 presents the 10-year increases for Canada and the Atlantic Provinces.

EXHIBIT 7

TOTAL HEALTH EXPENDITURES, PER CAPITA, CANADA AND ATLANTIC PROVINCES, 1978-1987



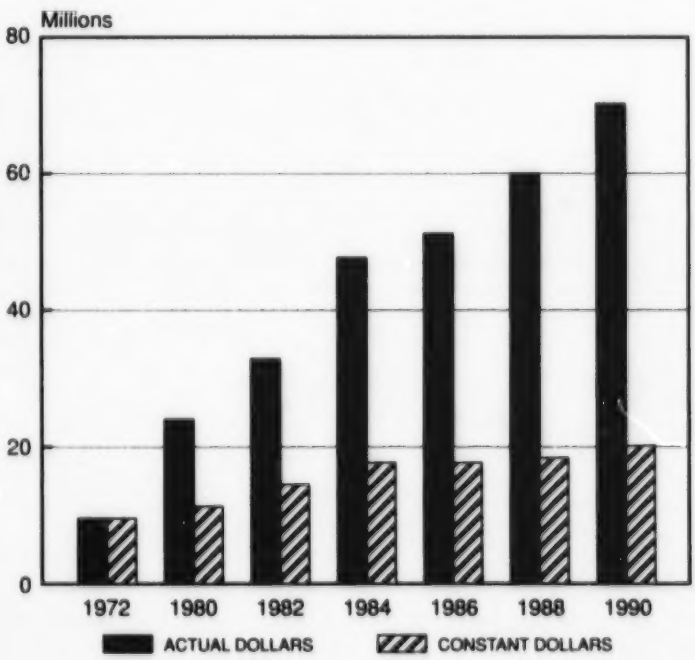
Source: Health and Welfare Canada

A) In-province Hospital Costs

A review of the past 18 years, indicates major increases in hospital costs. The following graphs present some information about the growth in hospital and physician expenditures on P.E.I.

EXHIBIT 8

IN-PROVINCE HOSPITAL OPERATING COSTS, 1972-1990



Source: Hospital and Health Services Commission Annual Reports, 1972, 1980, 1982, 1984, 1986, 1988, 1990

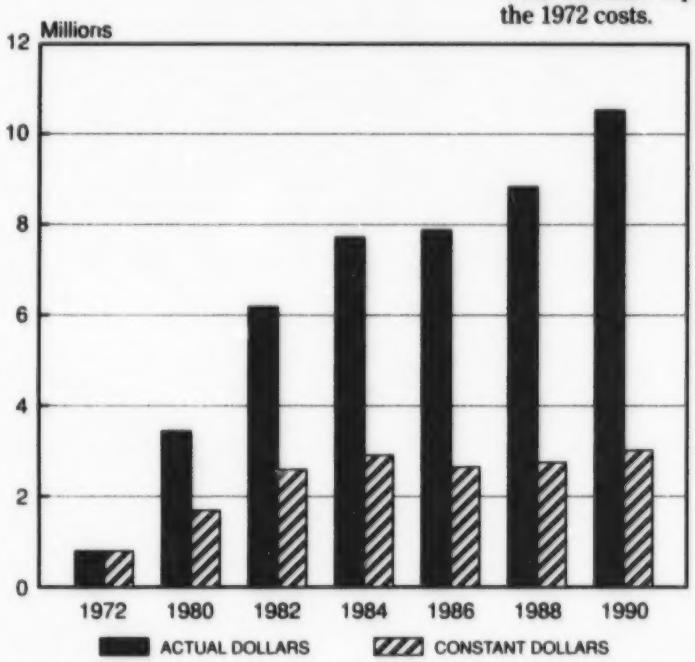
In-province hospital operating costs have increased by almost seven times the costs for 1972. This is in spite of the number of hospital beds having only increased by 18. However, if the rate of inflation is considered and cost expenditures are expressed as 1972 dollars, then the rate of increase has only little more than doubled in an 32-year period.

B) Out-of-Province Costs

A similar pattern is evident in the out-of-province expenditure trends. Actual expenditures have increased approximately 10 times while constant expenditures are about triple the 1972 costs.

EXHIBIT 9

OUT-OF-PROVINCE HOSPITAL COSTS, 1972-1990



Source: Hospital and Health Services Commission Annual Reports, 1972, 1980, 1982, 1984, 1986, 1988, 1990

Exhibit 10 presents the rates charged by some out-of-province hospitals to P.E.I. when residents of P.E.I. are in- patients in those hospitals. These figures compare to an average cost per day for a hospital bed.

It should be noted that out-of-province costs reflect a direct payment from P.E.I. to another province. This means that although some out-of-province hospitals may charge a lower rate than a P.E.I. hospital bed costs, there is no saving to P.E.I. if a person uses an out-of-province hospital. It is always an "add-on" cost when an out-of-province service is accessed, as this province must continue to fund and operate the 694 P.E.I. beds, as well as pay the additional out-of-province care.

EXHIBIT 10

IN-PATIENT HOSPITAL RATES, CHARGED TO P.E.I. PER DAY FOR OUT-OF-PROVINCE HOSPITAL SERVICES, 1990/91

Some Out-of-Province hospitals (basic rates):

Nova Scotia	
Grace Maternity	$531
Victoria General	608
Izaak Walton Killam	863
Camp Hill Medical Centre	461
New Brunswick	
Moncton General	$402
St. John Regional	418
Ontario	
Toronto Sick Children	$825
Princess Margaret	716
University Hospital, London (Transplant Center)	1,390

Source: Interprovincial Billing Data

In spite of efforts to provide comprehensive health services, it is well recognized that not all health services can be provided by P.E.I., and many people must access services out-of- province. Exhibit 10 provides a list of some procedures often provided out-of-province and the cost per procedure paid by this province. Because these procedures are defined as "high-cost," they are billed in addition to a hospital's daily in-patient rate. For example, if a resident of P.E.I. is required to stay at the Victoria General Hospital as an in-patient, this province will pay $608 per day for a ward room, plus $1,090 if a procedure called magnetic resonance imaging (MRI) is done on the neck and thorax.

In an effort to manage out-of-province expenditure, the Hospital and Health Services Commission implemented an Out-of- Province Liaison Program in 1989.[8] This program has been responsible for savings of approximately $1 million per year by reducing the length of stay in an out-of-province hospital.

EXHIBIT 11

"HIGH COST" PROCEDURE BILLING RATES, APRIL 1, 1990 - MARCH 31, 1991

Hemodialysis	$ 266.00
Computerized Axial Tomography (CAT Scan)	266.00
Lithotripsy per kidney per day	1,925.00
Magnetic Resonance Imaging (MRI):	
- head scan	545.00
- body scan	1,090.00
- neck & thorax	1,090.00

Source: Inter-Provincial Reciprocal Billing Rates

C) In-Province Hospital Beds

Directly related to financial expenditures for hospitals is the number of beds within the institutions (see Exhibit 12). The past ten years show very little growth in total acute care beds for P.E.I.

Although there is an overall increase in beds, it should be noted that the composition of bed types has changed, with 50 of the 351 beds at the Queen Elizabeth Hospital being rehabilitation and psychiatry beds, which were not previously part of the P.E.I. and Charlottetown Hospitals. In effect, the number of beds available for medical/surgical care decreased from 333 to 301.

EXHIBIT 12

ACUTE CARE BEDS, P.E.I., 1980-1990

Hospitals	1980	1982	1984	1986	1988	1990
Q.E.H.	333*	351	351	351	351	351
P.C.H.	162	16	162	162	162	162
K.C.M.H.	50	50	50	50	50	50
Souris	21	21	21	21	21	25
St. Memorial	13	13	23	23	23	23
Community	33	33	33	33	33	33
Western	50	50	50	50	50	50
	662	680	690	690	690	694

* 333 is the combined total of the Charlottetown and P.E.I. Hospitals.

Source: Hospital and Health Services Commission Annual Reports 1980, 1982, 1984, 1986, 1988, 1990

8. Hospital and Health Services Commission of Prince Edward Island, *Out-of-Province Liaison Project Report* (Charlottetown: Queen's Printer, 1989).

If the number of beds per 1,000 population on P.E.I. is compared to other provinces of Canada, P.E.I. rates as the fourth highest. This data is presented in Exhibit 13.

EXHIBIT 13

APPROVED BED COMPLEMENT OF PUBLIC GENERAL HOSPITALS: CANADA AND THE PROVINCES, NUMBER OF BEDS AND BED PER 1,000 POPULATION, 1988/89

Province	Number of Beds	Beds Per 1,000 pop.
Canada	127,771	4.9
P.E.I.	**690**	**5.4**
Nfld.	2,827	5.0
N.S.	4,831	5.5
N.B.	4,337	6.1
Quebec	30,528	4.6
Ontario	42,466	4.5
Manitoba	5,883	5.4
Saskatchewan	7,058	7.0
Alberta	12,866	5.4
British Columbia	15,971	5.4

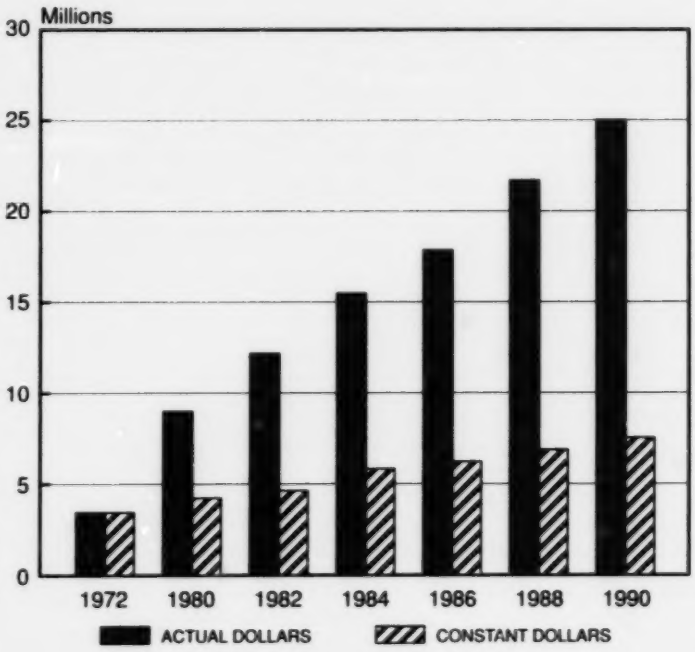
Source: Statistics Canada, Quarterly Hospital Information System, Cat. No. 83-002, Statistics Canada, Post-Censal Estimates of Population for Canada, Provinces and Territories, Cat. No. 91-210

D) Cost of Physician Services

A major component of health care costs is physician services. The costs from 1972-1990 are presented in the following two graphs:

EXHIBIT 14

COST OF IN-PROVINCE PHYSICIAN SERVICES, 1972-1990

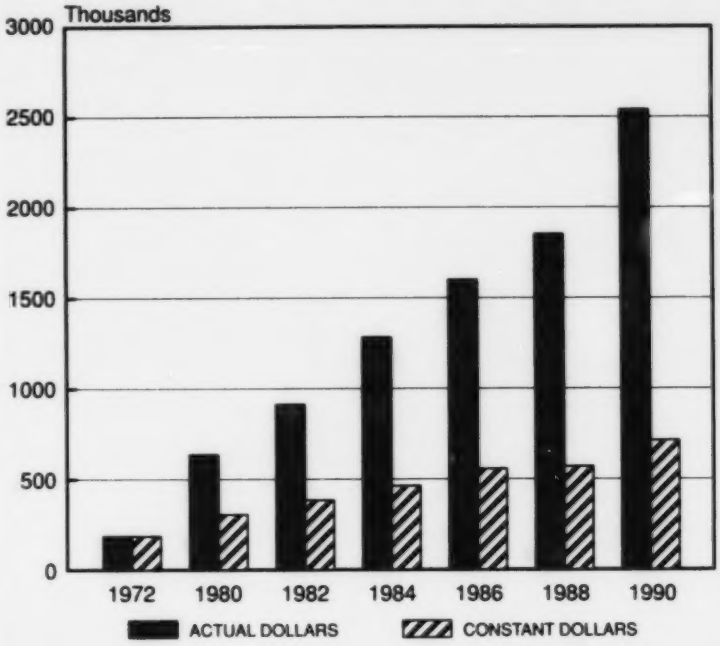


Source: Hospital and Health Services Commission, Annual Reports, 1972, 1980, 1982, 1984, 1986, 1988, 1990

In actual dollars, payments in 1990 were more than six times the 1972 costs, while constant dollars were slightly less than double. In 1972, there were 73 full-time physicians who were paid over $20,000 by the Health Insurance Plan. If the $20,000 is adjusted for Consumer Price Index (CPI) to 1990 dollars, this compares to 130 full-time physicians paid through the Health Insurance Plan in 1989/90.

EXHIBIT 15

COST OF OUT-OF-PROVINCE PHYSICIAN SERVICES, 1972-1990



Source: Hospital & Health Services Commission, Annual Reports, 1972, 1980, 1982, 1984, 1986, 1988, 1990

Out-of-province physician services, as presented in Exhibit 15, have increased approximately 12.5 times the 1972 expenditures in actual payments, while constant dollars show a 3.5 times increase. When compared to the constant dollar increase for in- province physician services, the data indicates that payments to out-of-province physicians are increasing faster than payments to in-province physicians.

Physician service costs can be derived from two sources: 1) utilization (the number of services) and 2) fee cost (payment made for each service).

When payments to physicians increase, it can be the result of:

-an increased number of physicians;
-the same number of physicians providing a greater volume of services, due to changes in practice styles or public demand;
-the same number of physicians receiving a higher payment per service, or
-a combination of one or more of these factors.

E) Human Resources Involved in Health Care

The provision of health care is a labour intensive activity, as the following table clearly demonstrates. Over a 10-year period, the number of health care professional and paraprofessional staff employed within the province has grown considerably and the nature of staff services has changed considerably. The human resource investment represents the major portion of the health care cost at the operational level in any facility or organization.

EXHIBIT 16

HUMAN RESOURCES INVOLVED IN HEALTH CARE IN P.E.I.

	1978	1988
Audiologists (active)	1	3
Biomedical Engineers	0	3
Chiropractors	2	4
Dental Assistants	34	89
Dental Hygienists	20	20
Dentists	44	51
Dietitians	31	39
Health Record Administrators (certificants & associates)	9	14
Medical Laboratory Technologists (active, certified)	63	98
Medical Radiation (X-Ray) Technologists	36 (1982)	52
Nurses - registered (ANPEI statistics)	982	1,270
Nursing Assistants	503 (1984)	595
Occupational Therapists (employed)	8	21
Opticians (active)	19	23
Optometrists (active)	5	10
Orderlies (employed in public, general & allied special hospitals)	33	33
Pharmacists	60	73
Physicians (payments > $20,000 according to H.H.S.C. data):		
- general practice	68	86
- specialists	45	59
Physiotherapists (active)	14	23
Podiatrists	0	1
Psychologists (active, registered or licensed)	N/A	28
Respiratory Therapists	1	5
Social Workers	31	60
Speech Pathologists (active)	6	10
TOTAL	2,015	2,670

Source: Health and Welfare Canada, ***Health Personnel In Canada*****, 1988**

NOTE: Statistics are based on those numbers of individuals licensed or registered with provincial associations or licensing bodies, unless otherwise stated.

EXHIBIT 17

TOTAL CLASSIFIED HOSPITAL HUMAN RESOURCES IN THE PROVINCE OF PRINCE EDWARD ISLAND

	AS OF JAN. 5/90
Administration	23
Admitting	23
Communications	21
CSR/Porter	58
E.C.G./E.E.G. Technicians	8
Engineering	50
Finance	24
Housekeeping	119
Laboratory	115
Laundry	34
L.N.A.	161
Materials Management	11
Medical Records	14
Nutrition Services	162
O.R. Aide/Technicians	9
Orderly	34
Pharmacy	21
Physical Medicine/Rehab	33
Psychology	1
Radiology	43
Registered Nurses	554
Respiratory Therapy	7
Social Work	6
Support Staff	183
Utility Worker	12
Total	1,726*

Source: Pay Equity Audit, January 5, 1990

NOTE: Statistics are based on the total number of employees who are employed, including both full-time and part-time staff.
*There are approximately 400 employees who work on a casual basis not included in this figure.

VI. HOSPITALS—THE LEVELS OF CARE

In an earlier section of this report the broader health care community was described and the entire range of services were located on a spectrum or continuum of care. This section will attempt to define more specifically the services that are generally associated with the acute care hospitals on Prince Edward Island.

The Panel's terms of reference mandated the Panel to identify the appropriate types and levels of care to be provided by Island hospitals. Early in the evaluation process it became obvious this would be a difficult undertaking for the Panel. The information needed for this task did not exist, and acceptable instruments of measurement had never been developed. Extensive work would be required, at both the provincial and local levels, demanding time and expertise which the Panel was unable to provide.

During the interviews, the subjectivity of individual professionals regarding levels of care and acuity levels was illustrated by the divergence of perspectives on the subject. Within a hospital a practitioner might argue the acuity levels of the cases being managed were steadily increasing, while a colleague would say services were heavily leaning towards stable longer term care. A hospital might argue it was treating more acute psychiatric cases, while in the opinion of others the acuity level differed little from that being provided on medical units of other hospitals. A hospital might offer an Emergency Services Department but, in the opinion of others, an ambulance operator should bypass that hospital with a view to having the patient stabilized at another hospital.

The two larger hospitals on P.E.I. have a work load measurement system for determining nursing staffing levels required on a daily basis. Some believed the system (GRASP) indicated acuity levels while others believed it only measured work load levels. The five other hospitals had no similar measurement tool. The Hospital and Health Services Commission, the funding agency with legislated responsibility for hospital standards, had no meaningful system in place to assist the Panel in its deliberations over the levels of care provided across the province. Hence, the Panel could not assume the responsibility of developing levels of care indicators or an acuity classification system. Instead, the Panel focused on examining the traditional categories of service and how these might apply with respect to Island hospitals.

When looking at hospital services, some recent literature categorizes the types of acute care treatment intervention into four levels: **primary, secondary, elevated secondary** and **tertiary care**.

> **Primary care** denotes that level of care that consists of basic curative care, restorative care, chronic care, preventive care, and/or essential health counselling or education.
>
> **Secondary care** consists of a more specialized level of intervention requiring the use of sophisticated and complicated diagnostic equipment and/or procedures. General internal medicine and general surgery would be examples of secondary care interventions.
>
> **Elevated secondary care** consists of specific specialized care requiring sophisticated and complicated diagnostic procedures and treatment which is found only in some regional centres where adequate population and the special human and technical resources are available to ensure program viability.
>
> **Tertiary care** consists of a level of medical intervention which requires a high level of specialized knowledge and skill, and usually involves the utilization of highly technical diagnostic or treatment instruments to supplement the patient's care plan. Examples of tertiary care might include interventions such as radiotherapy, neurosurgery, hemodialysis and neonatal types of care.[9]

While the above categories assist the process of defining or characterizing levels of care, the continued improvements in medical technology make for a "moving boundary" type of phenomenon. What might have been regarded as tertiary care five years ago might now be secondary care. Nevertheless, the primary, secondary, elevated secondary and tertiary distinctions are useful when looking

9. New Brunswick Hospital System, *Master Plan* (New Brunswick: n.p., 1987).

at the capability of a particular facility, and these levels were used by the Panel to examine the situation in hospitals on P.E.I.

The Panel is aware that even these universally recognized levels of medical interventions will prompt considerable debate, especially when attempting to isolate a particular service or procedure. The criteria used for labelling a service differ among professionals. Some argue the province does not provide tertiary services—Halifax or Moncton are the nearest tertiary care centers. Instead, they refer to a few selected high-tech and complex procedures done in P.E.I. as elevated secondary level of interventions.

The complexity of this issue accounts for the divergence in perspectives. For discussion purposes only, the Panel has made an attempt to classify existing clinical services in Exhibit 18. This table has not had the benefit of debate by the major stakeholders and should not be considered as the Panel's attempt to entrench services within the designated categories. The Role Panel believes that the larger questions of the needs and demands of the population with respect to the acute care system must be pursued further. What are the needs that hospitals must respond to, what services are to be delivered? How must the hospital system within the province be organized to respond to these needs? The Panel will comment further on this subject with a recommendation in the report.

EXHIBIT 18

LEVELS OF CARE - P.E.I.
HOSPITALS

Hospital	# of Beds	Primary Services	Secondary Services	Elevated Secondary Services	Teritiary Services	Outpatient/ Outreach
Community (O'Leary)	33	Emergency Services, General Practice Medicine, Pediatrics, Low Risk Obstetrics, Nursing, Basic Radiology, E.C.G., Pharmacy, Clinical Dietetics and Basic Laboratory	Nil	Nil	Nil	Emergency, Outpatient Clinics, Specialty Clinics
King's County Memorial (Montague)	50	Emergency Services, General Practice Medicine, Pediatrics, Low Risk Obstetics, Nursing, Basic Radiology and Screening, E.C.G., Pharmacy, Clinical Dietetics and Basic Laboratory	Nil	Nil	Nil	Emergency, Outpatient Clinics, Specialty Clinics
Prince County (Summerside)	162	Emergency Services, General Practice Medicine, Pediatrics, Obstetrics, Nursing, Laboratory, Radiology, E.C.G., Respiratory Therapy, Occupational Therapy, Physiotherapy, Pharmacy Services and Clinical Dietetics	Colonoscopy, Oncology*, Peritoneal Dialysis, Psychiatry, General Surgery, Basic Gynecological surgery, Basic ENT surgery	Nil	Nil	Emergency, Outpatient Clinics, SpecialtyClinics, Day Surgery and Visiting Specialty Clinics
Queen Elizabeth (Charlottetown)	351	Emergency Service, General Practice Medicine, Pediatrics, Obstetrics, Nursing Radiology, E.C.G., Respiratory Therapy, Occupational Therapy, Phisotherapy, Pharmacy Services and Clinical Dietetics	Oncology, Plastic Surgery, Laboratory, Physiatry, Dermatology, Rehab. Medicine, Nuclear Medicine, Radiotherapy, CT Scanning, Neonatal Intensive Care, Vascular Surgery, Peritoneal Dialysis, Psychiatry, Urology, General surgery and Gynecological surgery	Orthopedic surgery, Some general surgery, ophthalmic surgery, vascular surgery	Urology surgery, Some ENT surgery, Gynecological micro-laser surgery	Day Surgery, Emergency, Outpatient Clinics, Day Programs, Visiting Specialty Clinics, Psychiatric Community Liaison
Souris (Souris)	25	Emergency Services, General Practice Medicine, Pediatrics, Low Risk Obstetrics, Nursing, Basic Radiology, E.C.G., Pharmacy, Clinical Dietetics and Basic Laboratory	Nil	Nil	Nil	Emergency, Outpatient Clinics, Specialty Clinics
Stewart Memorial (Tyne Valley)	23	Emergency Services, General Practice Medicine, Extended Care, Nursing, Basic Radiology, E.C.G., Pharmacy, Clinical Dietetics and Basic Laboratory	Nil	Nil	Nil	Emergency, Outpatient Clinics, Specialty Clinics
Western (Alberton)	50	Emergency Services, General Practice Medicine, Pediatrics, Nursing, Basic Radiology and Screening, E.C.G., Pharmacy, Basic Laboratory and Clinical Dietetics	Nil	Nil	Nil	Emergency, Outpatient Clinics, Specialty Clinics

* Oncology services are limited to one day a week by the provincial oncologist.

Source: Hospital Role Panel, 1990

VII. THE IMPACT OF MEDICAL TECHNOLOGY

There can be no question that medical technology has been in the forefront of many of the improvements and enhancements to the practice of medicine and the delivery of health care. Many technological enhancements have increased the capacity of the health care system to assist and treat the individual patient. However, there is a growing fear that the health care system and the individual consumer of health services may have become too preoccupied with the mystique of technology.

Health care generally, and the hospital in particular, continues to be faced with increased pressure to adopt more and more new medical technologies. Medical technology can be defined as "...the drugs, devices and medical and surgical procedures and treatments used in medical care, and the organizational and supportive systems within which such care is provided."[10] This general definition can be further broken down into several sub-definitions which can be useful in better understanding the impact of new technology. One sub-definition of medical technology includes "substitute technology,";[11] a technology which provides for a better, more efficient way of accomplishing an existing task or activity. An example of this type of technology would be the utilization of automatic analyzers in the laboratory to replace the manual analysis of samples. This would be a case of replacing an obsolete technology with a better and more efficient substitute.

A second type of medical technology can be what is referred to as a "competing technology";[12] this describes the situation in which two or more technologies are used for the same purpose, where there is no definitive information available to establish that one is any better than the other. This type of technology generally presents problems; it often increases both the cost and complexity of medical care, and it may also increase risk and decrease efficiency.

A third type is referred to as "add-on technology";[13] this technology makes it possible to do something which was previously impossible, but does not necessarily increase productivity, nor does it reduce overall health costs. With each new technical advance and its subsequent diffusion into the broad practice of medicine, the range of available diagnostic tests and medical interventions increases. Most new medical technologies fall into this category; the impact of "add-on technology" on overall health expenditures can be significant.

In general, technology is applied to the practice of medicine to support five basic functions:

1) it can assist in visualizing parts of the body;
2) it can assist in measuring physiological function;
3) it can assist in substituting for lost function;
4) it can assist in contributing to surgical procedures;
5) it can assist in processing information.[14]

No one would dispute that medical technology has had a major impact on the practice of medicine over the past two decades. Its use and application is both commonplace and expected. There are a number of reasons for the widespread popularity of technology in medicine. In the first instance, we are living in an age in which technology is given high profile and value; there is hardly a part of our day-to-day functioning which does not bring us in contact with technology. Technology tends to convey an image of efficiency, enhancement and a general message of being up-to-date. Hence, there is an image that equates modern technology with high quality medicine.

A second factor is the dynamic of increasing public expectations; there is pressure on hospitals and physicians to perform a procedure because it can be done, and not neces-

10. U.S. Congress, Office of Technology Assessment, Technology Transfer at the National Institutes of Health (Washington, D.C.: Government Printing Office, 1982), p. 10.

11. Department of National Health and Welfare, Martin D.L. Health Technology: Tiger or Pussycat? A review report for the Assistant Deputy Minister, Health Services and Promotion Branch, and the Advisory Committee on Institutional and Medical Services.

12. Pettiti, D.B., "Competing Technologies: Implications for the costs and complexity of medical care," *New England Journal of Medicine*, no. 315 (1986), 1480-1483.

13. Bennett, I.L., Technology as a Shaping Force, in J.H. Knowles (Ed.) *Doing Better and Feeling Worse, Health Care in the U.S.A.* (New York: W.W. Norton, Inc. 1977).

14. Jennett, B., "High Technology Medicine: How Defined and How Regarded". *Milbank Memorial Fund Quarterly* (n.p., 1985).

sarily because it will be of some benefit. The technological treadmill is further reinforced by the fear of liability; there is an inherent uncertainty in both diagnosis and prognosis procedures, and both physicians and hospitals fear legal action if all that could be done is not done.

Medical technology has made its presence felt in our provincial health care system as in other jurisdictions. It has had an impact on the type of medicine practiced, the range of medical services available, the availability of certain physicians and specialists, the utilization of certain diagnostic tests, the increasing costs of medical care, and the role and function of individual hospitals. The following gives some concrete examples of how technology has made its impact on hospital and medical care within the province, and how it can influence the eventual role or function of an individual hospital.

Improvements in laboratory testing equipment now make it possible to increase the range of procedures done in the lab of a community hospital. Many lab test results can now be automated, and do not require interpretation by a technician. An example of this is the Kodak Ectachem DT60 unit which has the capability to do many types of blood analyses, including electrolyte testing. Some hospitals believe if they are providing acute emergency care then electrolyte testing is essential.

Another issue impacting on the nature of the services in hospitals is the use of expensive drugs; for example, the use of streptokinase and activase in the treatment of patients with heart attacks. There are differing opinions in Island hospitals regarding the implications of using these drugs. Currently there are three hospitals which have protocols in place for their use. The use of these drugs requires additional training and staffing dollars, as their use can result in a more intensive health care intervention.

Another example is the development of day surgery services at the Prince County Hospital. Orthopedic surgeons now perform on a day-surgery basis procedures previously carried out at the Queen Elizabeth Hospital on an inpatient basis. Other technological advancements in surgical procedures suggest that some surgical techniques currently performed only at tertiary level centers can now be performed at secondary level centers.

The improvements in medical technology have transformed what was once specialized care into routine procedure, thus allowing tertiary care to become secondary care and secondary to become primary care. There is no question that the dilemma of determining the roles of individual hospitals within the overall hospital system and the appropriate level of services to be provided by each hospital will require much more study and discussion.

VIII. A REVIEW OF THE HISTORY OF HEALTH STUDIES

Beginning with the province of Newfoundland in 1984, seven other provinces have undertaken a serious examination of their hospital and/or health care system in recent years. In addition, The Canadian Hospital Association tabled a report, *Issues Concerning The Canadian Health System*, to the Standing Committee on National Health and Welfare in May 1988.

The common issues and concerns identified by these various studies include:
- the lack of coordination of mandates and service delivery practices among the various health care providers, and the generally poor integration regarding the continuum of care;
- centralized policy direction and planning, and the need for new delivery structures at the community level;
- the need to focus on and reinforce health promotion and prevention strategies;
- the escalating costs of health care, and the need to look at various cost-containment measures;
- utilization concerns, and the need for outcome measurements and evaluation strategies;
- human resource concerns; the recruitment and retention of physicians and other health professionals, staff education and development and support to those most in contact with the person in need of care.
- the advance of medical technology—how to constructively harness the benefits of medical technology while constraining its excesses.

The October 1988 decision to establish a panel to review and examine the role of the hospital in the health care system on P.E.I. was obviously taken in view of this national context. All provinces have begun to confront and struggle with the practical implications of many of the factors and trends impacting on health care.

While there has been this burst of energy and activity over the past five years, and a great deal of collective analysis has resulted, not many new issues have been revealed. A number of the fundamental issues confronting health care were documented and studied much earlier. In 1974 the federal government released the Lalonde Report, entitled *A New Perspective on the Health of Canadians*. This report not only chronicled many of the issues that are still familiar today, but also stressed the need for health care to focus on health status and health outcomes. Further, the 1980 report of Emmett Hall, entitled *Canada's National-Provincial Health Program—A Commitment for Renewal*, outlined in detail the challenges confronting our health care system. Again in 1986, the federal government tabled a strategy paper entitled *Achieving Health for All—A Framework for Health Promotion*. These three major reports were intended to set the stage for initiatives which could provide the basis for change within the system. However, none of these major efforts have resulted in any discernible consensus or strategy, at either the provincial or federal-provincial levels, toward major reform in health care.

The situation on P.E.I. has been no different. The field of health care has been the subject of study groups, task forces, and commission reports over the past two decades. One of these includes the *Prince Edward Island Health Care System Study* completed in 1975. This study was a joint undertaking of the Department of Health, the Hospital Services Commission, and the Health Systems Division of Health and Welfare Canada. The essential objective of this study is stated on page 13 of the final report:

"To determine whether or not the acute care hospital component of the overall health care delivery system can in fact become more effective and efficient, and still provide an acceptable standard level of care."[15]

This report made 27 recommendations; it is interesting to note some of the issues dealt with in the recommendations. The following is quoted directly from the above report:

Recommendations of the 1975 Report

1. An acute care hospital systems analysis should be a continuing activity in order to ascertain the impact of any controlled or uncontrolled change that has been introduced into the system,

15. Department of Health, Health and Welfare Canada, and Hospital Services Commission of Prince Edward Island, *Prince Edward Island Health Care Systems Study - Vol. IV - Summary, Recommendations and Conclusions* (Charlottetown: Queen's Printer, 1975). 13.

and to enable one to determine the manner in which the system is changing over time.

2. The basic computer program should be modified so that one can obtain and analyze the data more quickly.

6. An attempt should be made toward obtaining concurrence on what the acceptable range in the average length of stay of particular case types should be in order to attain utilization standards, and more accurately determine the number and type of acute care beds as well as other types of beds (i.e., extended care) that are required and where.

11. Two acute care hospital regions should be established based upon where people elect to go or are referred for service, with the cities of Charlottetown and Summerside as the regional centers.

15. Acute care hospitals with high occupancy rates and low flow rates should be analyzed in order to determine if they are actually functioning as acute care institutions.

21. An acute care hospital costliness index should be maintained in order that a relative rather than absolute comparison of acute care hospital inpatient costs can be provided.

24. It is essential that other components of the health care delivery system such as ambulatory and extended care be analyzed with regard to the interrelationship and impact these components have on acute care.[16]

As the foregoing series of recommendations indicate, the 1975 Health Care System Study listed a number of concrete and practical suggestions to assist in the planned development and managed growth of hospitals within health care. Many of these recommendations are as relevant today as they were in 1975.

In addition to the 1975 study, there was also the 1977 *Discussion Paper on Health Policy for Prince Edward Island* (Callbeck Green Paper). This paper suggested that a broad group of health hazards that represent risks should be targeted for health promotion initiatives; for example, poor nutrition, careless driving, lack of exercise, excessive drinking and smoking. This paper also suggested that a critical gap in the system was the lack of services for persons who are beyond the acute stage of treatment but require extended care. The paper further suggested an approach to deal with this problem, indicating that there was potential to reduce the number of acute care beds from 662 in 1977 to 559 in 1986.

A third effort to document and analyze the issues in health care on P.E.I. was completed in 1980, as part of the province's input to the Federal Health Services Review. This report looked at the implications of costs, particularly in view of the federal government's intent to limit the amount of federal finances. The report lists critical elements necessary to improve the system for the 1980s. These elements include issues such as:

- quality assurance;
- effectiveness and appropriateness of medical tests and treatments;
- accountability;
- outcome evaluation;
- multi-party involvement; and
- coordination.

One of the more consistent messages received by the Panel in the early phase of its consultation process was a resounding sense of skepticism from virtually every sector of the health system. Many people questioned the wisdom of putting more energy into documenting and describing the issues once again, when past behavior would indicate that no one - not government, hospital boards, or the medical profession seems interested in striving for a health care system that works to provide a quality service to the public in the most economically efficient manner. Against the backdrop of these previous studies, one can understand some of the skepticism.

The Panel is left with the view that most jurisdictions, including P.E.I., have tended toward a crises-driven or ad hoc approach to dealing with change in health care. Whether this direction has been by design or by default, the result has been consistent: we are "presiding" over the "chaos" that change inevitably brings rather than attempting to manage or direct the impacts of change. This reactive approach almost always leads to a point where the options available are fewer, the decisions more painful, and the implementation process more difficult. This may very well be the situation in which most jurisdictions, including Prince Edward Island, find themselves today.

16. Department of Health, Health and Welfare Canada, and Hospital Services Commission of Prince Edward Island, *Prince Edward Island Health Care Systems Study - Vol. IV - Summary, Recommendations and Conclusions* (Charlottetown: Queen's Printer, 1975). 13.

IX. HEALTH CARE IN TRANSITION

A) Organizational Culture

Before examining some of the factors currently impacting on health care, it is important to understand the nature of the "organizational culture" that has evolved within the health care environment. The health care system is not a system in the sense that one normally thinks of a system. In fact, health care has been most unsystematic in its development. Attempting to assist the health care community to adapt to the emerging trends and threats will require that its culture be clearly understood and fully taken into account. Some of the elements which characterize the health care culture include:

SINGLE INTEREST, COMMUNITY-BASED APPROACH

The early history indicates health care was the main interest and concern of the medical and nursing professions, with local community boards often taking the initiative to put hospital facilities in place. While this approach was extremely effective in developing many much-needed services over the early years, the structures now in place have difficulty in dealing with issues or trends that call for a more systemized, coordinated, larger system approach. In fact, it could be argued that the current board structure for hospitals blocks effective planning for the needs of a regional or provincial health care system.

DIFFUSED AND CONFUSED PROFESSIONAL BOUNDARIES

Once the sole purview of the medical and nursing professions, the health care field now has a whole range of other professional and paraprofessional staff who have created a niche in health care. These more recent roles were not developed in a rational manner which provides for consensus regarding function, role and responsibilities. Hence, there is currently a situation among the various professional groups where tensions can interfere with working effectively for the ultimate benefit of the patient or consumer.

DIFFUSED AND CONFUSED MANDATES

Within the publicly funded health care system there are different organizations, departments and agencies with various functions and roles. These various roles are either not well defined, not well communicated, or not well accepted. While many in the health field would acknowledge that this situation exists, there is no single structure which can be held accountable to resolve who is responsible for what. It is not uncommon to have more than one organization or group lay claim to a certain mandate, and to seek out and receive resources to provide similar services. The risk for service duplication is great, and just as important, some much- needed services may not be provided at all.

REACTIVE RATHER THAN PROACTIVE POLICY DECISIONS

At the actual intervention level health care must be, by its very nature, reactive; at the policy setting level, however, the direction should be the result of more thorough study and analysis. This is often not the case. Health care policy continues to be crisis-driven despite the wealth of studies and reports that have been undertaken over the past decade or so. There exists no structure which has been mandated the responsibility of establishing broad direction in health care policy. This weakness makes it difficult for the service providers to have a clear sense of their respective mandates, and this in turn can result in a poorly coordinated, poorly integrated, health care continuum.

The above summary is intended to underline a point that often gets missed when trying to understand the dynamics of change within the health care field; that is, there is a "culture" with a set of values, and a set of structures which must be understood and taken into account. The needs and interests of the various stakeholders must become identified in an overt sense, the new trends and challenges must be studied, new objectives must be established, and new delivery structures and vehicles must be negotiated.

X. FUTURE TRENDS

When one reviews the wealth of literature that abounds on the emerging trends in health care and couples this with the views and commentary that were submitted to the Panel during its consultations, one is left with an overwhelming sense of the challenge facing health care. It also impresses upon the Panel the margin of flexibility to manoeuvre within the health field may be narrower than ever before. There is simply, from a number of points of view, very little room for poor or ineffective policies, structures or programs. While the specific issues presenting themselves in health care are numerous, the larger trends can be summarized into several areas:

THE CONSUMER

Health is being viewed as a personal resource that is to be nurtured and provided for at all times, not only at the onset of illness or injury. People will be expected to be more responsible and accountable for their own health. This means that our health care system must assist the individual to address and confront certain life-style issues or practices. Consumers of health care services will have to examine the values that underlie their vision of health, and adjust their care and treatment expectations. This will mean that everyone will have to become increasingly involved in specific decisions with regard to his or her own treatment and care, and will have to face and accept, the limitations of the health care system to provide ideal outcomes.

THE ENVIRONMENT

There are daily reports of research studies which bring new evidence of yet another element in our physical environment that is hazardous to our health. The health community will have an increasing role to play in both the protection and prevention sectors over the next decade.

MEDICAL TECHNOLOGY

The technology explosion in health care has led to major changes in the system. C.T. scans and sophisticated life-support systems are now important aspects of hospital care and treatment. These developments create enormous pressures in terms of their impacts on costs as well as the ethical dilemmas they precipitate. Individuals and institutions both within and outside the health community are increasingly being challenged by the complex and difficult issues relating to the modern practice of health care.

DEMOGRAPHIC CHANGES

The elderly portion of the population is on the increase, leaving a smaller group of younger people. It is believed this will impact on health care in at least two ways. Health needs will likely increase as the number of elderly increase, and the care demands on the younger population will increase, placing greater stress on families.

SOCIAL CHANGES

The changing role of women in the work force, the changes in the structure of the family, and the increase in worker unionization are but three social phenomena that have impacted on the organization and cost of hospital care. In many cases, these and other sociological pressures will continue to challenge the management of the health care system over the long term.

PROFESSIONALIZATION

The high value placed on professional disciplines, together with the traditional place of the physician in the health care community, has led to health care structures which are unique. These structures are at times very unwieldy, and may have major shortcomings in terms of adaptability and responsiveness to change. Hospitals must respond to the needs of their patients, the professional and non- professional staff, and to the community which they serve. The current organizational structures are often inclined to decision-making by committee and can be prone to ongoing problems of lay versus professional control.

COMMUNITY HEALTH SERVICES

The hospital has expanded beyond its traditional role in that it is now providing services such as rehabilitation, day surgery, and community liaison in specific areas. In addition, groups or target populations that require special care are more evident in the hospital environment. This brings the hospital closer to the boundaries of other health agencies, which in turn requires that roles and responsibilities be clearly defined. If roles are not well defined, then the system generally gravitates toward further fragmentation and confusion. This may mean

that hospitals will tend to press for direct control of services which do not adequately meet the hospitals' need for support.

FUNDING

Most countries and jurisdictions are now confronted with the fact they will not be able to fund spiraling health care costs. This situation is only now being realized, although the trends have been clear for the past decade or more. The health care community is now struggling with the task of developing a rational strategy to provide quality health services while containing costs. This will not be an easy task.

LEGAL ACCOUNTABILITY

At one time the major burden with regard to liability rested with the physician directly involved with the case; now hospitals must share legal responsibility for most aspects of hospital care. In addition, regulation of the professions and collective bargaining continue to become increasingly complex. As an organization, the hospital must adapt and cope with the legal requirements thrust upon it.

XI. PUBLIC EXPECTATIONS — OUR CHALLENGE

Over the past decade there has been increasing concern over the growth in the health care system. This concern has been consistent throughout the western world. Some of the elements which have fueled the preoccupation with health care have been the huge escalation in the overall costs, the impact of medical technologies, and the professionalization of health care. While it is true that all of these are significant factors in terms of the growth and expansion of the system, there is another element often not commented on, but which is equally significant. This is the issue of public expectations. There is a powerful public demand that the health care system continue to develop to meet any future medical circumstance.

It has been said in more than one commentary on health care that the system is often the victim of its own successes. The medical improvements achieved within health care in the western world over the past 50 years have been remarkable. Most of us live at a time when we can go about our daily lives without concern for many of the infectious diseases or illnesses that were quite prevalent only a few generations ago. Improvements in basic health care coupled with the discovery and development of a range of drugs to treat infectious disease have brought us to this point. In addition to the enhancements to basic health care, the past two decades have brought us many medical "miracle" developments. Delicate surgical techniques and procedures, many of them life-saving in nature, have almost become the norm. When one reflects on some of these relatively recent medical "miracles," it is understandable that people have come to expect that their health care system can, and should, develop a treatment for every conceivable health problem.

In addition to these achievements, Daniel Callahan, in his recent book, *What Kind of Life*,[17] cites two other factors that have come together to place heightened expectations on health care. One of these is the value our North American culture places on the individual. In western culture the individual has a right to define his or her needs and expect the system to respond, without much reference to what is appropriate or necessary in terms of the public good. The other factor Callahan describes is the fascination of medical researchers and technological innovators with the challenge of meeting each new medical situation with more innovative methods and procedures. When one considers the situation in which all of these influences are at work simultaneously, then there is great pressure on the system to expand and grow.

In this context, the public's expectation that its health care system continue to develop to meet each and every new demand may appear plausible. However, it is not realistic. The capacity of the health care system from a cost point of view and a treatment point of view is finite. This fact will become increasingly clear over the next decade. The health care system will never be able to meet the expanding expectations of the public. In our North American culture all of us have been socialized to want to live our lives in comfort, free from the inconvenience or burdens that illness or injury might place on us. All of us instinctively want to keep the limitations of aging at bay, and to live healthy, robust lives forever. This is what both our human instincts and our cultural values reinforce in all of us. Our existing and future health care systems will not be able to meet these unrealistic expectations.

17. Callahan, Daniel, *What Kind of Life: A Challenging Exploration of the Goals of Medicine* (New York: Simon & Schuster Inc., 1990).

XII. FUNDAMENTAL MANAGEMENT ISSUES TO ADDRESS

As outlined in the previous chapter, there are a number of trends and factors which will impact on the direction and course of health care within the Province. These trends already are beginning to challenge the conventional assumptions and views about our health practices, and they are leading to questions regarding the effectiveness of our existing systems and structures. In this new context what is the future shape of the health care system, and what should the role of the hospital be within that system?

In reviewing the massive amounts of detailed information collected by the Panel, one common theme emerged: health care as a broad system is adequately resourced but not very well managed. Often the individual agency is able to manage effectively within its respective mandate; however, the system itself is not well managed. This is a criticism of the organization of the structures used to manage the system rather than a criticism of any specific institution or agency. Ideally, management within the health system should concern itself with those issues that will improve the effectiveness of the system as a whole. The principle of synergy must be understood by all the stakeholders. Do management structures, processes and outcomes recognize that the combined actions of the individual components are greater than the sum of the isolated actions of the individual parts?

While there is no question that there is an increasing interest in strengthening the management capability within the health care sector, the field remains fragmented at the policy, legislative, professional, budgetary, and management levels. The management of the health care system continues to be fragmented and reactive for the most part, and this fact alone should be one of the biggest concerns of the province.

The Panel has targeted four strategic areas where improved management would yield significant long-term improvements in effectiveness and efficiency in the health system. The Panel's major observations and recommendations are developed and contained in the next four chapters, entitled respectively:

XIII Managing the Policy Framework;
XIV Managing the Continuum;
XV Managing Utilization of Hospital and Medical Services; and
XVI Managing Human Resources.

To pursue seriously many of the recommendations put forward will require a great deal of commitment and energy on the part of everyone with a stake in the future of our health care system. In this sense then, the Panel states as its final recommendation that a Phase II initiative be established to address and follow up on the many issues.

XIII. MANAGING THE POLICY FRAMEWORK

A) Healthy Public Policy

It is now widely acknowledged that determinants of health status include a multitude of factors other than high-priced medical interventions. Education, safe housing, sanitation, employment and life-style are among the major determinants of health status. Many of these factors fall outside the traditional jurisdictions of hospitals and health departments. At any given point, there may be a number of sectors within government debating and deciding issues that ultimately will affect the well-being and health of Islanders, either in the short term or over a long period of time.

The Role Panel notes that on the ecological-environmental level, most countries around the globe are becoming increasingly aware of and alarmed about the extent of the ecological and environmental damage that is evident. Many jurisdictions have put in place environmental review mechanisms. The Role Panel believes the same level of concern is becoming increasingly evident with respect to the personal health status of people, both as individuals and as a population. When one considers the cost impacts of dealing with both the residual effects of poor health (health care and treatment costs), and the effect of the economy of a generally unhealthy population (lost productivity), then a greater effort toward ensuring health sensitive public policy is warranted.

In other provinces special committees have been established, in some cases reporting to the premier or cabinet, whose function is to monitor and examine government policy initiatives with regard to their potential impact on public health. The belief is that impact analysis at the senior policy levels within government, designed to ensure the development of "health sensitive" policies throughout the public sector, is health prevention at its earliest stage. Such a comprehensive "health sensitive" approach to policy initiatives would attempt to anticipate any long-term impacts on the health status of the population. The Panel is not aware of any such body or mechanism within the provincial government policy development or decision-making structure.

RECOMMENDATION #1

The Role Panel recommends that the provincial government establish and empower a structure at policy board level to review all governmental publicly funded initiatives within a health sensitive context and, where a possible health threat is anticipated or probable, advise government of the consequences.

B) Health Sector Policies

Within the health sector itself, the Panel was not able to identify any tangible framework for the development of broad health policy goals for the province. Health priorities and directions are not clear. During the Panel's consultations, many concerns related to the planning of public health services, both community-based services and institutional services, were registered. Service providers were concerned in general with the growth and expansion of services, and with the tendency to commit new funds to programs that had uncertain futures. "Where are we headed?" was an all too common question.

Broad policy goals for the province need to be developed by the major players in health care in concert with the consumer. These policy goals and principles should be embraced, articulated and actively promoted by the office of the Minister of Health and Social Services.

They should frame the context within which existing programs (hospital, government and community-based agencies) will be molded, and out of which new initiatives will be developed.

RECOMMENDATION #2

The Role Panel recommends that the Minister of Health and Social Services establish a process to develop a clear statement of policy goals in health care for the province, and this policy reflect the following principles:

a) A positive image of health - good health or "wellness" is a positive concept with known determinants;

b) Consumer participation - the consumer of health services must be challenged and encouraged to take more direct responsibility for becoming more knowledgeable about positive health practices, and about maintaining his or her own health;

c) The continuum of service is essential - the availability of a range of health services is necessary to ensure that health needs are met in the most practical, effective and efficient manner possible;

d) The capacity of the health care system is always finite - funding, the availability of medical technology and the availability of medical knowledge will never be able to treat every eventual medical situation or problem;

e) Service integration is essential - health care providers must be expected to operate as a larger system, rather than a series of isolated and fragmented sub-systems.

C) The Management of Health Care

There are currently no structures in place to provide for constructive dialogue regarding policy direction or delivery practices between hospitals and other health agencies. As this report indicated in an earlier section, for the most part the tradition in the health care sector has been one of working in isolation. Hospitals and other health agencies are not compelled by either policy goals or funding criteria to work together to plan for the health needs of the province as a whole. However, in recent years, hospitals have made considerable progress in working together. Aside from individual initiatives, a more active Hospital Association and some positive changes at the Hospital and Health Services Commission have contributed to greater cooperation among the hospitals.

Although there have been some positive developments in the area of discharge planning between hospitals and home care, under the existing structures there are few incentives for hospitals to commit themselves fully to plan cooperatively with the other health agencies. The organization of the system at present forces the major players to think and behave competitively. At the community level health agencies should be able to determine the health priorities of a community and submit budget requests accordingly. However, as an example, it is unlikely that a hospital would forego its funding request in the interest of seeing another public health nurse position established in the community.

The disincentives for cooperation are many, widespread and deeply rooted. The acknowledgment of this should not discourage efforts to seek solutions. The current and projected fiscal environment within the country and the province, coupled with lower levels of public tolerance for inefficiency, are compelling reasons for the province to seize the opportunity to bring about long-overdue structural reforms to health services. In short, the Role Panel questions whether a province with a population of 130,000 can justifiably continue to manage its hospital and health care system in this fragmented manner.

RECOMMENDATION #3

The Role Panel recommends that different management structures be developed to manage health care as an entire system. The Panel can see these structures having both a provincial focus in terms of policy development and imple-

mentation, and a community or local focus in terms of the actual management and delivery of services.

D Policy and Program Leadership

The Role Panel notes that two major health structures are responsible for the expenditure of over 30 per cent of the provincial budget. The Department of Health and Social Services, a line department, and the Hospital and Health Services Commission, a crown corporation, are both responsible for many of the major health programs in the province. Both have responsibilities for institutional care, particularly extended care; both have interests in community-based services, and both have responsibilities in mental health services—to name just a few areas of joint responsibility. The potential for overlap and territorial conflict is great when parallel structures exist to provide health services to the same geographic area.

In the Hospital and Health Services Commission's document entitled "New Directions in Health Services (1987)," the spectre of duplicating or even usurping the traditional role of the Department of Health and Social Services is raised. Notwithstanding the obvious potential for conflicting roles, the Panel notes the document was approved by Executive Council. The public and the Panel are left questioning which government structure actually has the designated responsibility for providing the overall leadership within the health sector.

The Panel understands and accepts that health care, in terms of the continuum of care, must involve a number of organizations and agencies at the delivery level. However, the Panel believes that the policy and administrative leadership must be working to support and achieve the same policy objectives or goals. Without mutual commitment to the same policy objectives, the ongoing management of the health care system is vulnerable to the individual interests and agenda of any one of several separate agencies.

The Panel questions how the delivery of services can be integrated at the community level if the reality is that existing policy goals, funding mechanisms, and delivery methodologies do not compel the major players in the provincial health care system to operate in an integrated manner.

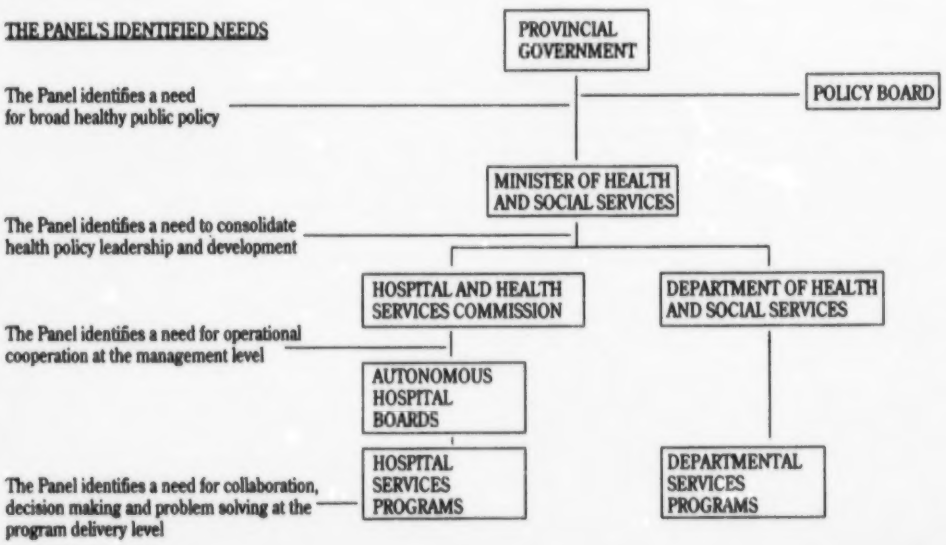
RECOMMENDATION #4

The Role Panel recommends that the leadership function with respect to the development and implementation of broad policy goals in health care within government be consolidated.

The Panel's first four recommendations are intended to address what the Panel believes to be major needs or deficiencies within the existing policy and program structure. The following table, attempts to describe these needs in a graphic fashion.

EXHIBIT 19

EXISTING PROVINCIAL GOVERNMENT HEALTH CARE SYSTEM


THE PANEL'S IDENTIFIED NEEDS
PROVINCIAL GOVERNMENT
The Panel identifies a need for broad healthy public policy
POLICY BOARD
MINISTER OF HEALTH AND SOCIAL SERVICES
The Panel identifies a need to consolidate health policy leadership and development
HOSPITAL AND HEALTH SERVICES COMMISSION
DEPARTMENT OF HEALTH AND SOCIAL SERVICES
The Panel identifies a need for operational cooperation at the management level
AUTONOMOUS HOSPITAL BOARDS
HOSPITAL SERVICES PROGRAMS
DEPARTMENTAL SERVICES PROGRAMS
The Panel identifies a need for collaboration, decision making and problem solving at the program delivery level

XIV. MANAGING THE CONTINUUM

A) The Role of the Hospital

Throughout the course of the consultation process, the Panel heard a number of suggestions regarding some of the more non- traditional roles that are being and should be considered by hospitals. Whether the hospital should expand its role beyond its traditional focus of acute in-patient care is a question which is open to debate. There are supporters and detractors on both sides of the argument; many hospital boards and hospital- based organizations would argue that a role expansion is justifiable, while others, largely community-based outreach and support services, would argue that it is more "normal" and cost-effective to deliver certain health services from a home-community-based focus.

As the concept of health care is changing from illness to wellness, hospitals reason that the critical mass of expertise that exists within facilities can be utilized in other areas of the health care continuum. This raises some questions which are at the root of the hospitals' struggles—should hospitals, as the major centers of diagnostic and treatment resources, attempt to assume the coordination function of all services? Would that bias the health systems towards health cures rather than health maintenance and illness prevention? Does the expansion of hospital outpatient/outreach service have the potential to compliment or conflict with community-based services?

Many of the submissions made to the Panel in the early stages of its consultations brought forward a wide range of divergent views and interests. A number of the submissions advocated service enhancements to hospitals, a number supported service enhancements for community-based programs, while still others advocated enhancements to both the acute care and community-based care parts of the continuum.

Aside from providing traditional acute bed care and medical procedures, hospitals are beginning to provide a broader range of services. Both Island hospitals and other health professionals are questioning their respective roles in non-traditional areas, some of which may be currently within the mandate of the Department of Health and Social Services. Some examples of the types of services that are the focus of the debate include:

-Health Promotion;
-Public Education;
-Disease Prevention;
-Ambulatory Care;
-Home Care;
-Palliative Care; and
-Community Liaison Nurse—Psychiatry and Rehabilitation

No discernible consensus emerged during the consultation process which could give the Panel a basis to conclude strongly a position on this issue. However, the Panel is convinced that as long as the debate exists there is a great risk that the issue of who should deliver the service will continue to take precedence over dealing with the immediate needs of those for whom services were intended. The future role or mission of the hospital must be determined in concert with the entire health sector in the community and as part of the larger provincial health care system. Any variation in the role of a hospital would involve a change in services traditionally offered, and certainly any significant change in the role of the hospital would impact on other health service systems.

RECOMMENDATION #5

The Role Panel recommends that no single health agency or hospital have the prerogative to initiate major change to its function or delivery structure without going through some pre-designed process to ensure the broad policy goals remain intact and the change in fact complements, and strengthens the continuum.

B) Service Integration

As a consequence of poor coordination and weak service integration, the most vulnerable party is almost always the person in need of services. While the "gate keepers" are invariably able to rationalize that it is not "my mandate," or not "my problem," the lack of appropriate services can be a huge problem to the individual needing care and support. From an organizational point of view, it is understandable that hospitals and other health

agencies must place parameters on who is to be served and on what is to be provided. However, what is less understandable is the apparent lack of inter-agency mechanisms to address the needs of those who inevitably fall through the cracks, or those whose needs do not seem to fit any agency's service criteria.

During the course of its interviews and consultations, the Panel encountered a number of observations and comments that reinforced the view that the health care system is not really a system, but a series of fragmented subsystems. While the Panel did not attempt to validate any of the following observations or comments, the essential message given was clear. Some of the observations regarding coordination and integration of services included:

- It is thought that a continuum of care does not exist. There are many players all having their own priorities, but no one is looking at coordinating priorities. There is a lot of "ball passing" between players—no one thinks any problem is within their mandate.

- There is a need for improved awareness of utilization and coordination of all aspects of service and resources available to patients within and between hospitals.

- Concern has been expressed that although providers may know the system and think that the public can access services, in reality, consumers know very little about the system and find it extremely frustrating trying to access services. Generally speaking, families are at the mercy of the system, and, in particular, the individuals who work in the system. Coordination may exist, but the players are very territorial.

- It is believed that the entire health care system needs to revamp the structure which would allow each of the players to see where their role fits in the "big picture." It was further stated that there are all kinds of resources that, if pooled, could have great potential. A structure and philosophy that facilitates and promotes networking is required.

- As a group, there is a terrible inefficiency in the delivery of services because there is no coordinated mandate. As a result—Health, Education, Social Services and Justice Departments find themselves dealing with issues as independent agencies.

In reflecting on a number of these observations, the Panel can sense that there is an absence of an overall "patient-based" philosophy of care that bridges individual institutions. There exists no policy framework which includes and commits all the relevant players to work together in the interest of the patient or client. It seems that the person in need of services can easily "fall through the cracks" or be "captured" by an inappropriate part of the system. The existing structure seems to allow individual institutions and agencies to continue to "protect turf," and this can result in the patient or client becoming a victim. In short, the Role Panel came across very little evidence that good basic case management techniques are valued or reinforced by current structures.

RECOMMENDATION #6

The Role Panel recommends that health care administrators and managers adopt a "patient-centered" approach to addressing and resolving the care and support needs of individuals who are in need of care, but may not meet the criteria of a particular facility. This would mean that each agency would have a referral mechanism in place to ensure that the person in need is referred to the most appropriate service.

XV. MANAGING UTILIZATION OF HOSPITAL AND MEDICAL SERVICES

Major Utilization Issues

The Panel had no difficulty in identifying the complex issue of utilization as one of the most pressing priorities challenging hospitals and the health system. Many who provided input to the Panel emphasized their concerns over the use of hospital and health services. Health professionals were very candid and open in discussing "resource use" in this province and the existence of, or potential for, inappropriate use.

Interviewees, written submissions, statistical analyses, reports from other provinces, and some of the current literature all reflect the growing awareness of utilization of health services as a major public and professional issue. The following are some of the comments and/or observations that were shared with the Panel during the consultation process. Again, as with all of the comments and observations in *Your Point of View*, the Panel did not attempt to validate any views expressed.

- The system should be doing less and evaluating more; the objective should be to do less but be more effective. Administration should be more involved in measuring outcomes and evaluating. It has been suggested that specific resources should be assigned to this role.
- There is a concern with the amount of repeat surgeries; older, more fragile patients with multiple problems seem to have a number of complications arising from their surgery.
- Greater emphasis must be placed on managing utilization of the system; this would require better information systems, e.g., the implementation of the Canadian Hospital Management Information System.
- Hospital utilization by adolescents could be reduced if other services were available in the community, e.g., social work services.
- The demands on emergency departments are growing due both to public expectations and family practice methods. For some physicians, the emergency department is just an extension of their office practice. A substantial user fee may limit abuse.
- There is a need for a thorough review of the over-use of technology and health care resources.
- There are no incentives for an aggressive utilization committee within a hospital.
- Patients who visit emergency departments repeatedly should be targeted as a group requiring special consideration to prevent frequent hospital visits.
- Some concern was expressed that C.T. scans are being ordered just because the unit is now available in Charlottetown—the supply is creating the demand.

As these comments and observations clearly indicate, the concerns regarding utilization within the acute care system are both diverse and wide-ranging. Unlike the continuum issue which attempts to examine the integration of the health care services, utilization begs a series of qualitative, effectiveness and efficiency questions. We are forced to ask "Are we doing the thing right?", "Are we doing the right thing?", or, in fact, "Should we be doing anything at all?"

It is the Panel's conclusion that utilization is a major element within health care which must be confronted. It is a significant issue demanding attention for two fundamental reasons: firstly, there is a growing recognition that resources are finite; and secondly, the medical necessity of a number of procedures and tests is being questioned. The Panel can identify several major areas where it is necessary for the Hospital and Health Services Commission, the hospital boards, and the Medical Society to work together to develop and put in place an effective utilization management program. The Panel believes a fundamentally essential element of a successful utilization management program is the existence of incentives. Stakeholders will be motivated to participate to the extent that they see incentives, benefits and gains. Some of the obvious areas to be included are: clinical and non-clinical areas, acute care hospital services, surgical services and medical technology.

A) Clinical and Non-clinical Areas

HOSPITAL BED UTILIZATION

This is an area which is critical to monitor in terms of utilization, both because of cost considerations and the effective use of hospital resources. There can be a number of ways to approach the issue of appropriate bed utilization. The Panel believes the Hospital and Health Services Commission, the Hospital Association and the Medical Society should commit themselves to develop and implement a systematic utilization management program.

DIAGNOSTIC TESTING UTILIZATION

This area ranks perhaps second to the bed utilization issue in terms of the need to have a management process in place. There is very little structure in place in any Island hospital with respect to the what, who, when and how regarding the utilization of the various testing procedures used for diagnostic purposes, for example C.T. scan, ultrasound, and lab. Again, the Panel believes this is a critical area which the Commission, the hospitals and the Medical Society should commit themselves to develop and implement a utilization management program.

"HIGH TECH" TREATMENTS OR PROCEDURES

Some other areas which might be incorporated into a management program include the utilization of certain "high tech" services or procedures; some cancer and heart drugs, as well as some surgical procedures; the use of medical and surgical supplies; and the use of drugs.

ROUTINE PATIENT CARE

In addition to looking at a number of clinical interventions, there is also a need to focus on some of the practices or routines that often go unnoticed. Many questionable routines throughout the hospital are consuming valuable, scarce resources which could be redeployed to areas requiring additional resources. For example, a lot of time is taken from scarce nursing resources to do routine activities such as the daily bathing and grooming of patients. The same could be said about the daily changing of bed linen. Could the resources now committed to many of these activities be redirected into other areas?

A major challenge exists to develop utilization techniques that can be used not only to control costs, but also to provide outcome measures, thereby bringing the performance of the health care system in line with defined goals. Utilization management evaluates the mix and volume of health care provided in a given geographic area during a specific period of time. It focuses beyond the dollars and cents in the budget to the larger issue of health outcomes of individuals and the population as a whole. Its purpose is to ascertain the appropriateness of health care provided, and to formulate policies and actions which will target specific health outcomes or results.

The Role Panel believes a more concerted effort must be directed to examining the utilization practices within hospitals in both the clinical and non-clinical areas. It must be a win-win situation—stakeholders can not feel threatened; it should be a general rule with a few exceptions. Becoming more proactive in the area of utilization management would put both the hospital boards and the Hospital and Health Services Commission in a better position to make appropriate decisions regarding the allocation of financial and human resources.

RECOMMENDATION #7

The Role Panel recommends that the Hospital and Health Services Commission, the Hospital Association and the Medical Society commit themselves to the development and implementation of a utilization management program. This program should target for early study bed utilization, diagnostic testing, and the use of medical and pharmaceutical supplies.

B) Acute Care Hospital Services

Another focus of concern is the area of services within the acute care system. What are the needs that hospitals must respond to, and should they be defined in a community context or a provincial context or both? What is legitimate or necessary in terms of out-of-province services, and should there be some formal protocol regarding access to out-of-province services? Attempting to answer these questions involves the right of individual boards to chart their own course, the issue of rural hospitals and urban hospitals, and the issue of centralization versus decentralization. The Panel acknowledges that some smaller hospitals continue to feel threatened by the impact of the centralization tendencies within the hospital system and by the general dynamics of the rural-urban dichotomy. During the consultation process, the Panel heard strong support from the rural hospital boards for the continued existence of their hospitals' primary acute care function.

In addition to the rural-urban dichotomy, there exists a rivalry or competition relative to hospital services between the communities of Charlottetown and Summerside. The issue of which hospital services are to be available on a provincial basis and which ones are to be provided through the community hospitals must be addressed. This is particularly so with respect to the Queen Elizabeth Hospital and the Prince County Hospitals.

The Role Panel acknowledges that the study of the entire area of hospital services and their distribution was part of its original mandate. However, the Panel was not able to bring this issue to a point where definitive recommendations could be made. The Panel gathered catchment area data, attempted to identify and describe services in terms of their primary, secondary and tertiary levels of intervention, and developed a *Service Profiles* Compendium. This data-gathering process was intended to support a discussion process targeted on hospital services and their distribution. This discussion process was to involve

representation from the Hospital Association, the Medical Society and the Hospital and Health Services Commission. Both time and the availability of the appropriate resources did not permit the Panel to engage in this final and most critical step in dealing with the level and distribution of hospital services.

The Role Panel believes this issue must be resolved. If it is not resolved, this issue will continue to have negative consequences on the system as a whole. The role of the smaller hospital within the larger health care system will continue to be problematic. The tensions and rivalries between the two larger hospitals will linger, and the overall financial impacts on the entire system will escalate.

RECOMMENDATION #8

8.01 The Role Panel recommends that the Hospital and Health Services Commission establish a process to address the issue of what services are to part of the provincial hospital system, where these should be provided, and which services should be obtained by going to an out- of-province facility.

8.02 The Role Panel recommends that the Hospital and Health Services Commission establish an out-of-province referral protocol to assist in the management of the utilization of out-of-province medical and hospital services.

C) Surgical Services

While in general the Role Panel did not deal in extensive detail with hospital services, one area that did receive the Panel's full energy was surgical services. The Panel commissioned a study paper on surgical services within the province. In May 1990, Role Panel staff completed an internal study of the status of surgical services within Island hospitals. In addition to providing details with respect to the nature and number of surgical services performed in Island hospitals, the study raised a number of questions or concerns which will need to be further pursued. Some of these include:

The availability of surgery beds - this issue is of particular concern at the Q.E.H. where there is a long waiting list. Often surgery beds are tied up by other "off-service" patients;

The waiting time for surgery - with rising consumer expectations and constrained financial resources, an individual hospital faces increasing pressure to strike a balance. Waiting lists need to be further analyzed before a real sense of the need can be determined. The numbers on the list can be skewed by differences in medical specialties, individual physician practice patterns and patient-initiated preferences or requests;

The potential for more day-surgery - the option of converting in-patient beds and procedures to day-surgery beds and procedures may be one way to deal with the demands on surgical services. However, this will require more study to determine how best to pursue and/or implement;

The need to assess surgical outcomes - are some procedures being performed unnecessarily, or at too great a physical cost to the patient? What are the ethical considerations?

The need for competency - any surgical service must strive at all times to meet the accreditation standards, operate at maximum cost-efficiency levels and provide a quality service. With new technology and information coming on stream, operating room staff must quickly become both informed and proficient. There is a need to ensure that standards are maintained in the service area.

In the area of hospital surgical services, the study paper suggests improved and increased day surgery as an option in providing some surgical services. The Panel suggests the whole area of hospital medical services undergo a similar study. Could further use of some of the new medical technology and the more creative use of medical support staff allow for more ambulatory services, and reduce the requirement for admission on an in-patient basis? Would this ultimately improve the medical care to patients? In the end, it must be acknowledged if health care costs are to be reduced, a reduction of or a change in the function of hospital in-patient beds is necessary. Any enhancement to the ambulatory or out-patient side of the equation without this adjustment will only result in adding on costs to the entire system.

The Surgical Services on P.E.I. Discussion Paper raised a number of questions, but did not put the Panel in a position to give any clear direction in terms of resolution. It is the Panel's view that much more work needs to take place before the issues noted above can be resolved.

RECOMMENDATION #9

The Role Panel recommends that the Hospital and Health Services Commission, together with representation from the Medical Society and the two hospitals which provide surgical services, address in a systematic manner the issues and questions raised in the *Surgical Services Discussion Paper*.

D) Medical Technology

An additional area in which management is becoming increasingly critical is the introduction and ongoing application of new medical technologies. The utilization of new technologies in health care generally fall within the areas of costs, effectiveness and ethical or

moral questions. In 1984, the Canadian Medical Association Task Force on the Allocation of Health Care Resources estimated that the introduction of new technologies caused an increase of between one and three per cent of total health expenditures per year during the previous decade.[18]

Attempting to moderate or manage the cost of new medical technology is something that most health jurisdictions are beginning to give more serious attention. One process that can assist in managing costs is to ensure that there is a mechanism in place to evaluate systematically a technology before it is introduced, and to monitor its use afterwards. The federal government requires manufacturers of drugs and medical devices to show that the product is safe and medically effective before it is sold in Canada. However, until recently there has been little effort to ensure that a systematic review mechanism was in place to monitor both cost and practice effectiveness.

A 1986 study by McMaster University researchers Greg Stoddart and David Feeny on the state of medical technology assessment in Canada came to some startling conclusions. They found that:

"Technologies are often accepted for use without evaluation;

"When evaluations are done, technologies are often put into use before the evaluations are completed;

"Technologies that have been evaluated and accepted for use are often used for conditions that were not covered by the evaluations;

"Technologies that have been evaluated, accepted, and used for their intended purposes, are often utilized too much;

"Even for technologies that avoid all these problems, their value may be dubious because there is an equally effective and less costly technology that is not being used."[19]

With respect to the ethical or moral issues which the utilization of new technologies inevitably bring, the health care community is only now beginning to acknowledge that it must develop mechanisms or vehicles to explore and debate. Physicians, hospital administrators, hospital trustees and health policy planners, are realizing that there is growing pressure to confront the use of technology to sustain or extend life from both a quality of life and a cost effective point of view. This will not be an easy task for any health jurisdiction.

In 1989, the federal government reached an agreement with the provinces on the creation of a small, non-profit corporation in Ottawa to function as a central agency to coordinate a systematic approach to evaluate and assess the appropriateness of new medical technologies. This office is named the Canadian Coordinating Office for Health Technology Assessment (CCOHTA).[20]

The mandate of CCOHTA includes the exchange of information on both new and existing technology, and to coordinate technological assessments that are being done by provincial agencies or researchers outside government. On P.E.I., a Health Care Technology Committee has been established within the past year, with representation from the Medical Society, the Hospital Association and the Hospital and Health Services Commission. This committee's purpose is:

1) To evaluate current and upcoming health care technology, including equipment, drugs and systems involving delivery of health care in both hospitals and community settings.

2) To publish guidelines or standards pertaining to the implementation of health care technology.

3) To review periodically any policy or guidelines, relating to health care technology, for its appropriateness.[21]

The Panel acknowledges that for individual hospitals to commit to a provincial process, decisions on technology that were once within the purview of autonomous, independent boards, the actual process should be designed with the input of the major stakeholders and be acceptable to them.

While there is little question that the advances in medical technology over the years has enhanced the capacity of our health care system, there is a growing concern regarding its use and application. The Role Panel believes that the Island health care system must become more systematic in its assessment and utilization of new technologies.

RECOMMENDATION # 10

The Role Panel recommends the following criteria be employed by the P.E.I. Health Technology Assessment Committee as guidelines to determine whether or not any new medical technology should be publicly funded:

18. Canadian Medical Association, *Health A Need for Redirection: Task Force on the Allocation of Health Care Resources* (Ottawa: Action Limited, 1984).

19. Greg Stoddard and David Fenny, "Policy Options for Health Care Technology" in *Health Care Technology: Effectiveness, Efficiency and Public Policy*, David Feeny, Gordon Guyatt and Peter Tugwell, eds., (Montreal: Institute for Research on Public Policy, 1986).

20. National Council of Welfare, "The Siren Call of Technology," *Health, Health Care and Medicare* (1990).

21. Minutes, P.E.I. Committee on Health Care Technology, March 20, 1990.

Effectiveness - whatever the intervention, it must first demonstrate some capacity to impact positively on a particular health problem or condition;

Cost Efficiency - where two or more proposed technologies are essentially equivalent in terms of effectiveness, the least expensive one should be preferred;

Acceptability and Equity - a proposed technology that is both effective and cost efficient must also be culturally and socially acceptable, and equally accessible or available to all those whose needs it might benefit.

Constraints on Effective Utilization

A) HEALTH CARE INFORMATION SYSTEMS

One of the very serious constraints that the hospital system currently faces with respect to utilization management is an extremely inadequate information system. Hospital administrators and health care planners simply do not have easy access to relevant and reliable information to aid research and decision- making. This also proved to be a serious limitation to the Role Panel throughout the course of the study.

Most hospital departments over the years have developed basic indicators of work load and utilization. In the absence of specific clinical data, the Panel was initially optimistic that these basic indicators would be of value in comparing service activity in similar departments across the province. However, this information was of limited value to the Panel. The value of similar units was weighted differently from hospital to hospital. A case in point was the reporting of a specific lab test: one hospital reported it as one test, while another reported the same procedure as 12 tests. Even the age-old indicator of patient days, which is a global standard in the hospital industry, represented different things and was calculated differently by hospitals.

The Panel's exercise of collecting this data from the hospitals and presenting it back to the hospitals for comparative purposes was entirely futile. Two points are clear: (i) data collection is not standardized among the hospitals and therefore can not be used for comparative purposes; (ii) when it becomes standardized and consistent, the information should be collected provincially and shared with the hospitals on a regular basis. It is worth noting, the Panel received very positive feedback from hospitals on the effort to present a comparative statistical report despite serious shortcomings. Hospitals would value receiving similar provincial statistical reports in the future, provided the consistency and reliability weaknesses are addressed.

The Hospital and Health Services Commission, with the legislated responsibility for medical and hospital insurance, is not able to satisfactorily account for the cost and quality of hospital services in this province. The very basic financial accounting instruments which were developed in the early 1960s remain in place, essentially unchanged, as the province enters the 1990s. Hospitals can not account for the treatment costs of a particular illness or the costs of an actual medical procedure. This acute lack of adequate product information in a major $70 million industry is a source of major concern. The hospital system will never make significant gains in managing its resources until a major initiative to develop a provincial hospital management information system is funded.

In October 1988, the Hospital and Health Services Commission and the Hospital Association of P.E.I. committed themselves to examine the management information needs of the hospitals. A study committee, with representation from both the Commission and the Association and chaired by the Computer Services Division, was established to develop a strategic plan for the automation of the information system within the province's hospital system. A consultant with expertise and knowledge regarding hospital information needs and requirements was contracted to assist the Committee's work. In September 1990, a strategic plan for the implementation of an island hospitals information system was delivered to the study committee.[22]

The core features of the strategic plan recommend that an Island-wide health care information network be put in place, that information systems within hospitals be standardized, and that an Island-wide central patient index be established. The Plan has received support from the individual hospitals, the Hospital Association of P.E.I., the Hospital and Health Services Commission and the Computer Priorities Committee of Government. There is no question that one of the critical elements of effective management is having accurate and timely information on which to base decisions and develop program objectives. The Panel's own experience with the unavailability of key information during the course of its work has illustrated the system's dilemma in this regard.

22. Clinicom/Chi, *A Plan for the Implementation of the Island Hospitals Information System* (1990).

RECOMMENDATION #11

The Role Panel recommends that the provincial government support and fund the introduction of an Island-wide computerized management information system for the hospital and health care systems within the province.

B) Standards and Outcomes

While there seems to be a level of awareness among the health professionals regarding outcome concerns, this has not yet translated into a plan of action to address the matter in a systematic fashion. Hospitals must evaluate their existing quality assurance programs, as most staff do not see these programs as a genuine effort to focus on outcome questions, but merely a hurdle to clear in meeting accreditation standards. Similarly, with respect to standards and outcomes of medical interventions, physicians are guided by the minimum guidelines established by their respective national and local governing bodies. In short, the setting of care standards, the completion of quality assessments and the determination of outcome measurements are features that are not well integrated into the management practices of most health care facilities.

This situation was noted not only by the Role Panel over the course of its work, but it has also been noted by the recent risk-management report regarding public services. The following observation and recommendation appears in the Risk Management Study for the Government of P.E.I.

"(a) The Commission administers three complete Acts and part of the Public Health Act, but little liability can originate with two of them since they deal entirely with the authority to pay. However, under the Hospital Act, the Commission must set standards for physical plant and health care. However, no criteria have ever been established and set down.

Recommendation: Standards for health care should be developed and set down. Later, standards for physical plant should be set down and any modifications to existing health care facilities should be considered."[23]

In addition, the June 1990, *Report on Medical Services*, completed by the Provincial Auditor General's Office, notes the importance of establishing health care indicators. The following observation is made.

"...an area that is receiving increasing attention in the health care community across Canada is the measurement of the general health of the population. This is important to determine whether the population is in fact healthier as a result of increasing government expenditures. Development of health care indicators would assist the Commission in determining whether the health care dollar is expended in the most effective manner...."[24]

The Hospital and Health Services Commission has identified the issue of standards of care within hospitals as a key priority area over the next several years. Staff within the Commission have begun to gather material and information from other provinces with regard to the issue of defining service standards. In addition, the hospital administrators have been consulted with regard to their views on how best to approach this very complex task, and their participation with regard to a standard setting process. Their response has been favorable and there is an agreement to continue discussions on how to structure the process.

The societal and legal trends toward full disclosure and the public debate on our health care system are quickly leading hospitals, physicians, and other health care workers to acknowledge the merits of standards and outcome measurements. The Role Panel sees this trend gaining momentum as we move into the 1990s, and the Panel believes this is one area where, as a system, hospitals can be proactive. Although training and support will be necessary for everyone involved, a thrust in this direction can have a positive impact on the health system in the long term.

RECOMMENDATION #12

The Role Panel recommends that the Hospital and Health Services Commission establish a process to define appropriate standards on which to measure health care outcomes in both the hospital and medical areas.

C) Public Expectations

In an earlier section of this report, the need to fully understand the impact of costs and the implementation of medical technology were noted as critical in terms of managing health care more effectively. Coming to terms with our expectations will also be critical. There is a need to understand and examine our beliefs and values and the impact of these values on

23. Melanber Inc., *Risk Management Study for the Government of P.E.I.* (February 1990), 62.

24. Officer of the Auditor General, *Hospital and Health Services Commission Report on Medical Services* (Charlottetown: Queen's Printer, 1990), 14.

our expectations of health care. What is important for us as individuals, and what is necessary for us collectively? Can our health care system accommodate these expectations or imperatives? If not, how do people begin to understand what the choices are? How does a community or public attempt to meet both the individual need and the needs of the public at large?

This matter of expectation is one of the larger challenges that is looming before us as a community and a society. It is one of the issues that must be confronted at the same time as we address issues of cost containment, efficiency of resources and effective outcomes. Unless the issue of public expectations is simultaneously addressed, any progress made on the other issues will be marginal at best.

RECOMMENDATION #13

The Role Panel recommends that the Hospital and Health Services Commission establish a process which will assist the public to examine the impact of their expectations on the health care system.

XVI. MANAGING HUMAN RESOURCES

There remains one more area within health care, and in the acute care setting particularly, that is key to the ultimate delivery of quality health care. This area has commonly been referred to in recent years as human resource planning. Staffing costs make up approximately 80 per cent of the annual budgets of most hospitals. Any item or area that accounts for this much of the total budget must be given due attention.

Again, the Panel received a number of observations and comments regarding concerns and/or issues related to management of human resources. A sample of these include the following:

- A hospital is a "people" organization-people working with people. Staff are more subject to burnout, stress and emotional problems than in many other organizations.
- Hospitals need people with problem-solving skills at every level of the organization. These individuals must be able to help people understand the system and the processes involved in getting their concerns to the agendas that count.
- Increased funding is necessary to provide staff with sufficient educational opportunity to keep pace with the rapid development in all areas of health care.
- Staff need skill development in the areas of leadership, motivation and communication.
- The day of the lone-wolf specialist is past. The province should be looking at province-wide departments in the specialties such as: laboratory medicine, radiology, ophthalmology, orthopedics. A reasonable rotation system should be devised and suitable administrative and organizational arrangements be developed between the two larger hospitals. Physicians are increasingly concerned about life-style issues and isolation.
- There are staffing shortages in physiotherapy, pharmacy, respiratory therapy and nursing; however, there is uncertainty over who has the mandate for health services resource planning on a provincial basis.
- Pensions should be transferable between provincial government and the hospitals. There should be more incentives for staff to rotate and move throughout the system, since the more exposure individuals receive, the broader their perspective will be.

Hospital care is by its very nature labour intensive and as such requires an extensive range of staffing capabilities to meet the service needs of patients and their families. The human resource area has traditionally been undervalued with respect to its overall potential to support the organization in its pursuit of quality care. In this regard the hospital system is not unusual or different. Recent literature suggests most organizations, whether public or private, undervalue the level of their staff's understanding, acceptance and commitment to the larger mission of the organization and its operational values.

In addition to the fact that the work environment within the hospital requires a wide range of specific knowledge, skills and personal capability, the administrative structure is quite complex. The management of a hospital system has traditionally involved three components: the board itself which generally has a strong representation from the "lay" public; the administrative staff; and the medical staff. This arrangement can often result in a most ambiguous chain of command. Depending upon the issue, it can be quite difficult for anyone to discern who is in control, what is the agenda, and what are the essential tasks to be completed to achieve certain results.

The task of managing a hospital system can be further compounded by the presence of several distinct professional groups and interests, the hierarchical nature of working relationships, the necessity of many formal regulations and operating protocols, and the presence of three unions representing staff interests.

Given such a complex array of competing interests, needs and objectives, it is not difficult to see how human resource issues are neglected. The hospital system in general has not been attentive to the need to properly manage and nurture its human resource capability. There is very little "value added" effort to ensure that staff remain motivated and current vis-à-vis their work assignments. The Panel believes that this is an area where future change is critical. Ultimately, the capability and attentiveness of the human resources of the hospital determine the quality of care provided to patients and their families.

RECOMMENDATION #14
The Role Panel recommends:

14.01 That hospital boards develop corporate goals which commit the hospitals, through philosophy and behaviour, to emphasize not only quality patient care, but also the needs and interests of care providers.

14.02 That the Hospital Association of P.E.I., through its labour relations position, assist hospitals in the development of a human resources support strategy; this strategy should include management training, recognition and incentive programs, career development, and the development of job enrichment, and employee assistance programs.

A) Structure

Earlier in this section the hospital management environment was described as complex; it is also highly centralized. Many of the organizational functions, structures and decision-making protocols, are essentially unchanged from the 1950s. Given the changes that have emerged in the field of organizational development within the last decade or more, there is opportunity for hospital management (this includes both hospital boards and administrators) to review and modify management styles and operational practices. Hospitals need to develop an organizational structure that stimulates, challenges and *includes* staff. The opportunity for staff to be included in the discussion and decision-making process regarding issues relevant to their function and work assignments is critical. The Panel believes that hospital management must review organizational structures and administrative protocols with a view to decentralizing the responsibility and authority for decisions relating to day-to-day work assignments and unit efficiency.

RECOMMENDATION #15

The Panel recommends that hospital boards, through their administrative staff, explore and adopt organizational structures and administrative protocols which recognize decentralization of responsibility and authority, and which empower unit managers to operate efficiently.

B) Staff Training and Development

In addition to the larger issues of organizational values and structure, the Panel noted a number of serious concerns which were identified frequently during the course of the personal interviews. These included areas such as training and development, opportunity for career enrichment and growth, and human resources planning.

With respect to staff training and development, the feedback was critical of current practices. The primary concerns included these observations:

- There is no organized agenda regarding training and development in the hospitals;
- What does take place seems targeted at certain groups, and some groups rarely get training opportunities;
- There is not enough funding directed to this area, and most often staff are expected to train on their own time.

The Panel believes that by not taking steps to address these essential concerns, the quality of support to the patient in need of care can only be eroded.

RECOMMENDATION #16

The Role Panel recommends that a working committee, chaired by the Hospital Association of P.E.I., be established to study and promote action on the issue of staff training and development in the hospitals. This study would examine such things as the effectiveness and adequacy of existing training methods, the equitable distribution of opportunities, and funding issues.

C) Job Enrichment

Career growth and job enrichment follows staff training and development as a second area of concern among many hospital employees. Hospital work environments on P.E.I. are no different than the school system or the civil service system in this regard. The systems are relatively small, the workforce itself is relatively experienced, but the opportunities for career development or change is limited. There is no system in place to facilitate the easy exchange of hospital employees with other hospitals or other health agencies. One of the first steps that might be taken to assist hospitals to establish the basis for a career development plan within individual hospitals is to use the annual performance appraisal exercise as an information collecting/planning instrument to guide career development. The Panel sees the area of career growth and job enrichment as a "high pay-off" area; a little concerted planning in this regard would have high dividends in terms of ensuring high quality service and care to patients, and in keeping the organization itself healthy.

RECOMMENDATION #17

17.01 The Role Panel recommends that the Hospital Association establish a working committee to establish guidelines to assist hospitals in putting in place an

effective employee performance appraisal process which would be used as a basis for career development.

17.02 The Role Panel recommends that the Hospital and Health Services Commission take the initiative to explore the potential of job-enrichment secondments or rotations between the various sectors (hospitals, Dept. of Health & Social Services, other health agencies) within health care.

D) Staffing—Requirements and Recruitment

The last area within the human resources sector on which the Panel wishes to comment on is the area of staffing. What are the staffing requirements, who is responsible for recruitment, what recruitment protocols are in place, and how do you retain certain health professionals? Again, it is clear to the Panel that this is a critical management function which simply has no plan of action. For many of the hospitals there is a difficulty in recruiting and retaining physiotherapists, occupational therapists, dietitians, respiratory technicians and pharmacy staff, to cite just a few of the more pressing areas of need.

Many of the above-mentioned areas are distinct specialties and as such, a particular professional background and experience is necessary in order for a hospital to provide the service.

However, in a small community this individual may be a team of one, and this is a particular problem in terms of support and development, and in terms of long-term retention. In some instances, the Department of Health and Social Services employs individuals in these same type of professions to provide community-based services. There are cases where a hospital and the Department jointly hire one individual to serve the hospital and community needs in a small geographic location. This approach may have merit and should be further pursued regarding its long term value to both the individual and the respective systems.

The Panel notes there is now a mechanism in place to study, project and respond to the need for physicians in the province - the Physician Resource Planning Committee. However, no such mechanism exists with regard to the ongoing need for other health professionals.

RECOMMENDATION #18

The Role Panel recommends that the Hospital and Health Services Commission establish a provincial standing committee to plan for the health personnel requirements for the entire health care system. This standing committee should have the interests of other health agencies represented to avoid conflict or duplication of efforts, and to strengthen recruitment and retention strategies.

XVII. CONCLUSION

If the Role Panel were to make one compelling conclusion as a result of its work, it would be this: public health care management, including hospital administration, must put much more time, energy and resources into *strategically managing* the health care system within the province. To continue to preside over the dynamics of change within health care as the province enters a new decade will be short-sighted, and will not serve well many of the very positive aspects of our health system which we enjoy today.

As stated at the outset, the initial terms of reference provided to the Role Panel were both ambitious and comprehensive. The Panel encountered a number of circumstances which, at times, seemed to both distract and/or limit its efforts. Nonetheless, the Panel believes it has produced a series of useful and informative reports, and a number of recommendations which the Panel strongly believes must be pursued seriously by those responsible for the management of our health care system. The Panel views its efforts as a beginning. It believes both the information contained in the supplementary documents and the Final Report will greatly assist the next stage of determining just how our hospital and health care system must change and adapt over the next decade.

The Panel is aware the recommendations cover a range of issues, and that a number of them fall within more than one area of jurisdiction or responsibility. The Panel is anxious that the primary responsibility for ensuring that its recommendations are pursued and acted upon be identified. A point of accountability must be established.

RECOMMENDATION #19

The Role Panel recommends that the Hospital and Health Services Commission and Government establish an Implementation Plan for Phase II to address and act upon the recommendations of the Panel. This Implementation Plan should be developed in consultation with the major stakeholders within the health care sector, and should be completed by September 1, 1991.

XVII. RECOMMENDATIONS

RECOMMENDATION #1

The Role Panel recommends that the provincial government establish and empower a structure at Policy Board level to review all governmental publicly funded initiatives within a health sensitive context and, where a possible health threat is anticipated or probable, advise government of the consequences.

RECOMMENDATION #2

The Role Panel recommends that the Minister of Health and Social Services establish a process to develop a clear statement of policy goals in health care for the province, and this policy reflect the following principles:

a) A positive image of health - good health or "wellness" is a positive concept with known determinants;

b) Consumer participation - the consumer of health services must be challenged and encouraged to take more direct responsibility for becoming more knowledgeable about positive health practices and about maintaining his or her own health;

c) The continuum of service is essential - the availability of a range of health services is necessary to ensure that health needs are met in the most practical, effective and efficient manner possible.

d) The capacity of the health care system is always finite - funding, the availability of medical technology and the availability of medical knowledge will never be able to treat every eventual medical situation or problem;

e) Service integration is essential - health care providers must be expected to operate as a larger system, rather than a series of isolated and fragmented sub-systems.

RECOMMENDATION #3

The Role Panel recommends that different management structures be developed to manage health care as an entire system. The Panel can see these structures having both a provincial focus in terms of policy development and implementation, and a community or local focus in terms of the actual management and delivery of services.

RECOMMENDATION #4

The Role Panel recommends that the leadership function with respect to the development and implementation of broad policy goals in health care within government be consolidated.

RECOMMENDATION #5

The Role Panel recommends that no single health agency or hospital have the prerogative to initiate major change to its function or delivery structure without going through some pre-designed process to ensure the broad policy goals remain intact, and the change in fact complements and strengthens the continuum.

RECOMMENDATION #6

The Role Panel recommends that health care administrators and managers adopt a "patient-centered" approach to addressing and resolving the care and support needs of individuals who are in need of care, but may not meet the criteria of a particular facility. This would mean that each agency would have a referral mechanism in place to ensure that the person in need is referred to the most appropriate service.

RECOMMENDATION #7

The Role Panel recommends that the Hospital and Health Services Commission, the Hospital Association and the Medical Society commit themselves to the development and implementation of a utilization management program. This program should target for early study bed utilization, diagnostic testing, and the use of medical and pharmaceutical supplies.

RECOMMENDATION #8

8.01 The Role Panel recommends that the Hospital and Health Services Commission establish a process to address the issue of what services are to part of the provincial hospital system, where these should be provided, and which services will be obtained by going to an out-of- province facility.

8.02 The Role Panel recommends that the Hospital and Health Services Commission establish an out-of-province referral protocol to assist in the management of the utilization of out-of-province medical and hospital services.

RECOMMENDATION #9

The Role Panel recommends that the Hospital and Health Services Commission, together with representation from the Medical Society and the two hospitals which provide surgical services, address in a systematic manner, the issues and questions raised in the *Surgical Services Discussion Paper.*

RECOMMENDATION #10

10.01 The Role Panel recommends the following criteria be employed by the P.E.I. Health Technology Assessment Committee as guidelines to determine whether or not any new medical technology should be publicly funded:

Effectiveness - whatever the intervention, it must first demonstrate some capacity to positively impact on a particular health problem or condition;

Cost Efficiency - where two or more proposed technologies are essentially equivalent in terms of effectiveness, the least expensive one should be preferred;

Acceptability and Equity - a proposed technology that is both effective and cost efficient must also be culturally and socially acceptable, and equally accessible or available to all those whose needs it might benefit.

RECOMMENDATION #11

The Role Panel recommends that the provincial government support and fund the introduction of an Island-wide computerized management information system for the hospital and health care systems within the province.

RECOMMENDATION #12

The Role Panel recommends that the Hospital and Health Services Commission establish a process to define appropriate standards on which to measure health care outcomes in both the hospital and medical areas.

RECOMMENDATION #13

The Role Panel recommends that the Hospital and Health Services Commission establish a process which will assist the public to examine the impact of their expectations on the health care system.

RECOMMENDATION #14

The Role Panel recommends:

14.01 That hospital boards develop corporate goals which commit the hospitals, through philosophy and behaviour, to emphasize not only quality patient care, but also the needs and interests of care providers.

14.02 That the Hospital Association of P.E.I., through its labour relations position, assist hospitals in the development of a human resources support strategy; this strategy should include management training, recognition and incentive programs, career development, and the development of job enrichment, and employee assistance programs.

RECOMMENDATION #15

The Panel recommends that hospital boards, through their administrative staff, explore and adopt organizational structures and administrative protocols which recognize decentralization of responsibility and authority, and which empower unit managers to operate efficiently.

RECOMMENDATION #16

The Role Panel recommends that a working committee, chaired by the Hospital Association of P.E.I., be established to study and promote action on the issue of staff training and development in the hospitals. This study would examine such things as the effectiveness and adequacy of existing training methods, the equitable distribution of opportunities, and funding issues.

RECOMMENDATION # 17

17.01 The Role Panel recommends that the Hospital Association establish a working committee to establish guidelines to assist hospitals in putting in place an effective employee performance appraisal process which would be used as a basis for career development.

17.02 The Role Panel recommends that the Hospital and Health Services Commission take the initiative to explore the potential of job-enrichment secondments or rotations between the various sectors (hospitals, Dept. of Health & Social Services, other health agencies) within health care.

RECOMMENDATION #18

The Role Panel recommends that the Hospital and Health Services Commission establish a provincial standing committee to plan for the health personnel requirements for the entire health care system. This standing committee should have the interests of other health agencies represented to avoid conflict or duplication of efforts, and to strengthen recruitment and retention strategies.

RECOMMENDATION #19

The Role Panel recommends that the Hospital and Health Services Commission and Government establish an implementation plan for Phase II to address and act upon the recommendations of the Panel. This implementation plan should be developed in consultation with the major stakeholders within the health care sector, and should be completed by September 1, 1991.

BIBLIOGRAPHY

Agnew, Harvey G. *Canadian Hospitals, 1920 to 1970 A Dramatic Half Century.* Toronto: University of Toronto Press, 1974.

Callahan, Daniel, *What Kind of Life: A Challenging Exploration of the Goals of Medicine* (New York: Simon & Schuster Inc., 1990).

Callbeck, Catherine. *Discussion Paper on Health Policy for Prince Edward Island.* n.p. 1977.

Canadian Hospital Association. *Submission to the Standing Committee on National Health and Welfare Issues Concerning the Canadian Health Care System and its Funding.* n.p. 1988.

Canadian Medical Health Association. *Health A Need for Redirection: Task Force on the Allocation of Health Care Resources.* Ottawa: Action Limited, 1984.

Catchpole, Brenda L.. "A Utilization Management Success Story". *Dimensions in Health Services.* February, 1991.

The Commission on Selected Health Care Programs in New Brunswick. *Report of the Commission on Selected Health Care Programs. n.p.* 1989.

The Coopers & Lybrand Consulting Group. *Looking to the Future: A Report on Health Care Trends in Ontario.* n.p. 1988.

Department of Health, Health and Welfare Canada, and Hospital Services Commission of Prince Edward Island, *Prince Edward Island Health Care Systems Study - Vol. IV - Summary Recommendations and Conclusions.* (Charlottetown: Queen's Printer, 1975), 13.

Department of National Health and Welfare. Martin D.L. *Health Technology: Tiger or Pussycat?* "A review report for the Assistant Deputy Minister, Health Services and Promotion Branch, and the Advisory Committee on Institutional and Medical Services."

Driscoll, Fredrick L. *Presentation to The Health Services Review '79.* Charlottetown: Queen's Printer. 1980.

Education Health Environment Ottawa Ltd. *Role Study Souris Hospital.* n.p. 1982.

Government of Quebec. *Improving Health and Well-Being in Quebec. n.p.* 1989.

The Honourable Jake Epp, Minister of National Health and Welfare. *Achieving Health for All.* Ottawa: Queen's Printer, 1986.

Hospital and Health Services Commission of Prince Edward Island. *Nursing Forum Report.* Charlottetown: Queen's Printer, 1989.

————. *Nutrition and Dietetic Needs Study.* Charlottetown: Queen's Printer, 1990.

————. *Out-of-Province Liaison Project Report.* Charlottetown: Queen's Printer, 1989.

————. *Pre-Hospital and Emergency Services Study.* Queen's Printer, 1990.

————. Prince Edward Island Health Care System Study Summary, Recommendations and Conclusions. Charlottetown: Queen's Printer, 1975.

————. Prince Edward Island Health Care System Study Summary, Recommendations and Conclusions. Charlottetown: Queen's Printer, 1975.

————. The Prince Edward Island Health Forum Report. Charlottetown: Queen's Printer, 1988.

Jennett, B. "High Technology Medicine: How Defined and How Regarded." *Milbank Memorial Fund Quarterly.* 1985.

Kelner, Merrijoy. "Community Support Networks." *Canadian Journal of Public Health*, May/June, 1985.

Knowles, J.H., ed. *Doing Better and Feeling Worse, Health Care in the U.S.A..* New York: W.W. Norton, Inc., 1977.

Manitoba Health Services Review Committee. *Report of the Health Services Review Committee,* Volume I-IV. n.p. 1985.

Melanber Inc. *Risk Management Study for the Government of P.E.I.* February, 1990.

Meilicke, Carl A. and Janet L. Storch ed. *Perspectives on Canadian Health and Social Services Policy: History and Emergency Trends.* Michigan: Health Administration Press, 1980.

National Council of Welfare. "The Siren Call of Technology." in *Health, Health Care and Medicare.* 1990.

New Brunswick Hospital System. *Master Plan.* April, 1987.

Nova Scotia Royal Commission on Health Care. *The Report of the Nova Scotia Royal Commission on Health Care Towards a New Strategy.* Volumes I - III and Summary, n.p. 1989.

Office of the Auditor General. *Hospital and Health Services Commission Audited Financial Statements for the year ended March 31st, 1990.* Charlottetown, 1990.

————. *Report on Medical Services Hospital and Health Services Commission* n.p. 1990.

The Panel on the Hospitals' Role in the Health Community. *Discussion Paper-Surgical Services on P.E.I.* n.p. 1990.

————. *Hospital Catchment Area; Demographic Description.* Montague, P.E.I., 1989.

————. *Out-of-Province Specialists Clinics.* n.p. 1989.

Pettiti, D.B.. "Competing Technologies: Implications for the costs and complexity of medical care." *New England Journal of Medicine*, no. 315, 1986.

Premier's Commission on Future Health Care for Albertans. *The Rainbow Report: Our Vision for Health.* Volumes I-III. Edmonton: Queen's Printer, 1989.

Prince Edward Island Committee on Health Care Technology. Minutes. March 20, 1990.

Royal Commission on Hospital and Nursing Home Costs. *Report of the Royal Commission on Hospital and Nursing Home Costs to the Government of Newfoundland and Labrador.* n.p. 1984.

Saskatchewan Commission on Directions in Health Care. *Future Directions for Health Care in Saskatchewan.* n.p. 1990.

Stoddard, Greg and Feeny, David. "Policy Options for Health Care Technology." In *Health Care Technology: Effectiveness, Efficiency and Public Policy,* David Feeny, Gordon Guyatt and Peter Tugwell, eds. Montreal: Institute for Research on Public Policy, 1986.

U.S. Congress, Office of Technology Assessment. *Technology Transfer at the National Institutes of Health*. Washington, D.C.: Government Printing Office, 1982.

Weatherill, Jeffery. "Health Care Facilities of the Future." *Dimensions in Health Service*. February, 1991.

Woods Gordon Management Consultants, *Report of the Royal Commission on Hospital and Nursing Home Costs*. n.p. 1984.

APPENDIX A

Index of Submissions to the panel on the hospitals' role in the health community.

Listed in alphabetical order:

1. Abegweit Sports & Recreation for the Disabled
2. Abortion Rights Action League, Canadian
3. Acadian Community Advisory Committee
4. Addiction Services, King's County
5. Alberton Ladies Aid
6. Alcohol and Drug Problems Institute, Inc.
7. Benstead, Dr. T.J.
8. Cancer Society, Canadian, P.E.I. Division
9. Cardiovascular Nurses, Canadian Council of
10. Celiac Association, Canadian
11. Chiropractic, P.E.I. Association
12. College of Family Physicians
13. Community Hospital, O'Leary
14. Community Living, P.E.I. Association for
15. Community Mental Health
16. Council of Maritime Premiers
17. Cystic Fibrosis Foundation, Canadian, P.E.I. Chapter
18. Dalhousie University, Dean of Medicine
19. Dental Association, P.E.I.
20. Dermatology Association, Regional Representative of
21. Dewar, Dr. George
22. Dietetic, Association, P.E.I.
23. Dr. John M. Gillis Memorial Lodge
24. Drug Abuse, P.E.I. Citizens Council on
25. Emergency Measures Organization (E.M.O.), P.E.I.
26. Emergency Preparedness Canada
27. Environment, P.E.I. Department of
28. Epilepsy, P.E.I.
29. Evangeline Health Care Co-op
30. Federation of Labour, P.E.I.
31. Finance, P.E.I. Department of
32. Guidance & Counselling Association, P.E.I.
33. Health Line
34. Health Records Association, Canadian
35. Health Records Technicians of Smaller Hospitals

Health and Social Services, P.E.I. Dept. of

36. Heart & Stroke Foundation of Canada, P.E.I. Division
37. Hemophilia Society, The Canadian
38. Home & School, The P.E.I. Federation of
39. Hospice, The Island Association of
40. Hospice, Southern King's Co. Inc., Montague
41. Hospital Association of P.E.I.
42. Housing Corporation, P.E.I.
43 Human Rights Commission, P.E.I.
44. Kidney Foundation of Canada, P.E.I. Branch
45. King's County Memorial Hospital, Montague
46. King's County Memorial Hospital Senior Auxiliary, Montague
47. Kinsmen Clubs, The Association of
48. L.N.A.'S of Souris Hospital
49. L.N.A.'S, Community Hospital, O'Leary
50. L.N.A.'S, The P.E.I. Association of
51. Laboratory Technologists, Canadian Association, P.E.I. Branch
52. Mann House Corporation
53. Meals on Wheels, Alberton Branch
54. Meals on Wheels, Charlottetown
55. Meals on Wheels, Kensington
56. Mental Health Association, Canadian, P.E.I. Division
57. Multicultural Council Inc., of P.E.I.
58. Multiple Sclerosis Society, King's & Queen's Chapter
59. Muscular Dystrophy Association of Canada, P.E.I. & Nfld. Branch
60. North Rustico, Village of
61. Nurses Association of, P.E.I.
62. Nurses Union, P.E.I.
63. Nursing Assistants, Central School for
64. Nursing Home Association of P.E.I.
65. Nursing, Faculty Dean, University of New Brunswick
66. Nursing, P.E.I. School of
67. Nutrition & Consumer Studies, St. Francis Xavier University
68. Nutritionist, West Prince
69. O'Leary, Concerned Citizens of
70. O'Leary, Ladies Auxiliary
71. Occupational Therapy Society, P.E.I.
72. Operating Engineers Local 942
73. Optometrists, P.E.I. Association of
74. Orthopedic Nurses Association, Nova Scotia Chapter
75. Orthotics, Island
76. Pathologists, Canadian Association of, P.E.I. Branch
77. Pharmacy, Canadian Society of
78. Physical Medicine & Rehabilitation, P.E.I. Representative
79. Physiotherapy, Canadian Association, Q.E.H.
80. Physiotherapy, School of, Dalhousie University
81. Prince County Hospital, Summerside
82. Queen Elizabeth Hospital, Charlottetown
83. Radiation, Medical Technologist Association of P.E.I.
84. Rape and Sexual Assault Crisis Centre
85. RCMP "L" Division, OIC Criminal Operations
86. Recovery Inc.
87. Right to Life Association, P.E.I.
88. Royal Canadian Legion, Branch 6
89. SIDS, Canadian Foundation for the Study of Infant Deaths
90. SADD, Students Against Driving Drunk
91. Schizophrenics, Friends of, P.E.I.
92. School Trustees Association, P.E.I.
93. Smoking & Health, P.E.I. Council on
94. Smoking Addictions
95. Souris Health Council
96. Souris Hospital
97. Speech & Hearing Association, P.E.I.
98. St. Louis, the Commissioners of the Village of
99. St. Thomas Aquinas Society
100. Status of Women, P.E.I. Advisory Council on
101. Stewart Memorial Hospital Ladies Auxiliary
102. Summerside, Town of
103. Tignish, Community of
104. Tourism, P.E.I. Department of
105. Transition House Association
106. Unit # 1, Regional Administrative
107. Unit # 2, Regional Administrative
108. Unit # 5, Regional Administrative

109. Veterans Affairs, Assistant Deputy Minister
110. Volunteer Services Department, Queen Elizabeth Hospital
111. War Amputations of Canada, P.E.I. Branch
112. West Prince Christian Council
113. West Prince Literacy Council
114. Western Hospital, Alberton
115. Women's Network

APPENDIX B

Listing of individuals/organizations interviewed by the panel

1. Adams, Rick
2. Allum, Curtis
3. Aquilina, Mario
4. Arsenault, Rita
5. Barlow, Debbie
6. Beck, Dr. Angus
7. Bernard, Albert
8. Bernard, Jeannita
9. Biggar, Kendra
10. Birt, Susan
11. Blackadar, Dorothy
12. Blackwood, Dr. Rob.
13. Bonnell, Dr. Lorne
14. Bradley, Dave
15. Brennan, Lester
16. Browne, Cynthia
17. Buchanan, Doris
18. Buchanan, John
19. Bulger, Nancy
20. Burke, Alfred
21. Callaghan, Mary Jane
22. Cameron, Dr. Doug
23. Campbell, Kaye
24. Carew, Wayne
25. Carragher, Angela
26. Carruthers, Edith
27. Casely, Bertha
28. Coffin, Albert
29. Colborne, Dr. Robert
30. Coles, Margaret Anne
31. Cook, Nancy
32. Cowan, Connie
33. Cowan, Fran
34. Craig, Susan
35. Cutcliffe, Heather
36. Cuthill, Major R.G.
37. Daley, John
38. Dalton, Evelyn
39. DesRoches, Ken
40. Dewar, Dr. Charles
41. Dewar, Dr. George
42. Dickieson, Dr. Herb
43. Dobbelstyn, Nancy
44. Dockendorff, Mart
45. Doherty, Jean
46. Dowds, Rev. John
47. Doyle, Margaret
48. Driscoll, Jude
49. Edgecombe, Joanne
50. Egan, Mike
51. Enman, Don
52. Ezeard, Margot
53. Farrell, Dr.Richard
54. Fitzpatrick, David
55. Fletcher, Randall
56. Forsythe, Dr. Pam
57. Francoeur, Barb
58. Fraser, Betty
59. Gabanna, Carol
60. Gallant, Arlene
61. Gallant, Joan
62. Gallant, Sandra
63. Gallant, Sheila
64. Gaudet, Graham
65. Gaudet, Melinda
66. Gauthier, Geri
67. Gillan, Frank
68. Glydon, Erna
69. Gordon, Sandra
70. Gorrill, Debbie
71. Gorrill, Doris
72. Gorrill, Mae
73. Gorveatt, Rozanna
74. Green, Alice
75. Haire, Mary
76. Hambly, Dr.David
77. Hansen, Dr. Phillip
78. Harris, Anne
79. Harvie, Barb
80. Henry, David
81. Howard, Rev. Ross
82. Humphrey, Lillian
83. Ing, David
84. Jeffrey, Roger
85. Jenkins, Nora
86. Johnston, Dr. Geraldine
87. Kielly, Marion
88. Kelly, Dr. Paul
89. King, Dr. Laval
90. Ladner, Cecil
91. Larter, Cynthia
92. Lawlor, Bill
93. Lawlor, Rosanne
94. Leard, Hartley
95. LeClair, Pat
96. Lewis, Kay
97. Locke, Ellen
98. Loder, Gordon
99. Lord, Shirley
100. Losier, Dr. Arthur
101. Mabon, Barb
102 MacAulay, Frances
103. MacAusland, Rosamond
104. MacCallum, David
105. MacDonald, Angela
106. MacDonald, Nancy
107. MacDougall, Debbie
108. MacEachern, Betty
109. MacFadyen, Gail
110. MacFadyen, Nancy
111. MacFarlane, Marcia
112. MacInnis, Rod
113. MacIver, Maureen
114. MacKay, Bethany
115. MacKay, Liane
116. MacKenna, Nora

117. MacKenzie, Dr. Elmer
118. MacKenzie, Jack
119. MacKinnon, Leona
120. MacKinnon, Nancy
121. MacLeod, Gail
122. MacLeod, Harold
123. MacLeod, Muriel
124. MacLeod, Thelma
125. MacMillan, Dr. Colin
126. MacNeill, Helen
127. MacNeill, Helen
128. MacQuillan, Linda
129. MacGuire, Mary
130. MacWilliams, Florence
131. Madigane, Dr. Joyce
132. Magennis, Dr. Terry
133. Mann, Dr. Brian
134. Martin, Bev
135. Martin, John
136. Matters, Sr. Rita
137. Matusiewicz, Phil
138. McClumpha, Linda
139. McLaren, Cindy J.
140. Millar, Robert Jr.
141. Mingo, Lane
142. Moffatt, Karen
143. Montgomery, Carol
144. Montgomery, Dr. Roy
145. Morrison, Jim
146. Morrissey, Dr. Coleman
147. Murphy, Ethel
148. Muzumdar, Dr. Ashok
149. Myers, Wilma
150. Neatby, Anne
151. Nicholson, Terry
152. Nicola, Dr. Adnan
153. O'Brien, Dr. Steve
154. O'Rourke, Erma
155. Palmer, Barb
156. Paquet, Patti
157. P.E.I. Medical Society
158. Penny, Clyde
159. Perry, Heather
160. Perry, Mary
161. Peters, Pauline
162. Pfinder, Elizabeth
163. Phelan, Dr. Paul
164. Phillips, Ruth
165. Pineau, Dr. Edwin
166. Quick, Gayle
167. Rackham, Brenda
168. Ramsay, Myra
169. Ready, Janet
170. Rennie, Eva
171. Riley, Janie
172. Rix, Alma
173. Roberts, Glenda
174. Robinson, Sgt. Brian
175. Rogers, Janet
176. Rogers, Peggy
177. Rogerson, Gail
178. Rose, Arlene
179. Ross, Donna
180. Rossiter, Hilda
181. Salamoun, Dr. Wassim
182. Sark, Marilyn
183. Sethi, Dr. B.R.
184. Sharbell, Colleen
185. Sharpe, Elaine
186. Shaw, Betty
187. Shaw, Roma
188. Silliker, Keith
189. Slaunwhite, L. Cdr. C.R.
190. Smallman, Christine
191. Smith, Bobbi
192. Soutar, Dr. John
193. Steeves, Dr. Donald
194. Stewart, Pauline
195. Strang, Joan
196. Sweet, Barbara
197. Taylor, Dr. Don
198. Thorkelson, Jim
199. Triantafillou, Dr. Mark
200. Tuck, Harold
201. Veale, Dr. Christine
202. Verma, Dr. T.
203. Vessey, Marjorie
204. Vickerson, Dr. Don
205. Vienneau, Paulette
206. Villard, Carolyn
207. Waite, Eileen
208. Walker, Dr. Bill
209. Walsh, Donna
210. Webb, Trevor
211. Wedlock, Lloydia
212. White, David
213. Williams, Norma
214. Williams, Shirley
215. Wong, Dr. David
216. Ezeard, Ken *
217. Hayden, Donna *
218. Jenkins, Joy *
219. MacAdam, Ethel *
220. Quecke, Horst *

*** Inadvertantly omitted from the initial publication**